

Bid Number 50-00132469

TWO (2) YEAR CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY AND STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN JEFFERSON PARISH FOR THE JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS, SEWERAGE

BID DUE DATE, TIME: JANUARY 5, 2021 AT 2:00 PM

ATTENTION VENDORS!!!

Please review all pages and respond accordingly, complying with all provisions in the technical specifications and Jefferson Parish Instructions for Bidders and General Terms and Conditions. All bids must be received in the Purchasing Department by the bid due date and time.

Jefferson Parish Purchasing Department 200 Derbigny Street General Government Building, Suite 4400 Gretna, LA 70053

Buyer: Daphne Nelson

Email: DNelson@jeffparish.net

Phone: (504) 364-2650

CYNTHIA LEE SHENG PARISH PRESIDENT RENNY SIMNO DIRECTOR

September 2020

Changes to Jefferson Parish Bidding Information

The Jefferson Parish Purchasing Department would like to make vendors aware of the following changes:

Total Bid Price Must Include the Cost of Naming Jefferson Parish as Additional Insured:

Bidder acknowledges that Bidder recovered the cost of any required insurance in the contract price as required by La.R.S. 9:2780.1 and that Bidder recovered any such cost for the purposes of insuring an obligation to indemnify Jefferson Parish, defend Jefferson Parish, or hold Jefferson Parish harmless and that Bidder's indemnity liability is limited to the amount of the proceeds that are payable under the insurance policy or policies that Bidder has obtained.

<u>Electronic Procurement</u>: Beginning November 1, 2020, Jefferson Parish will no longer accept manual bid submissions; and will only accept bid submissions electronically via our e-Procurement system, Central Bidding. Central Bidding can be accessed by visiting either www.centralbidding.com or www.jeffparishbids.net. All bidders will be required to register with Central Bidding. Jefferson Parish vendors are able to register for free by accessing the following link: https://www.centralauctionhouse.com/registration.php.

<u>Probable Construction Cost</u>: Per Jefferson Parish Administrative Policy, the probable construction cost is not revealed in the Jefferson Parish Bidding Documents. Jefferson Parish Administrative Policy has changed and a range of the probable construction cost will be stated in the Jefferson Parish bidding document, entitled Important Notice to All Bidders – Bid Requirements. Per Louisiana Public Bid Law, the probable construction cost will be read at the bid opening.

<u>Insurance Requirement</u>: All bidders must provide proof of valid insurance in the required amounts as stated in the Standard Insurance Requirements for bidding purposes. Failure to provide the proof of valid insurance in all of the required coverage amounts will result in bid rejection.



Designation of Construction Contractor as Agent of a Governmental Entity Sales Tax Exemption Certificate

						, an ag	ency of the United
States government, or an agency,		I Name of Governmental En mmission, or instrum		State of L	ouisiana or its po	litical sub	divisions, including
parishes, municipalities and school	boards, o	loes hereby designat	e the following	contracto	or as its agent for	the purpos	se of making sales
tax exempt purchases on behalf of	the gover	rnmental body:					
Name of Contractor							
Address							
City				State	ZIP		
					1		
This designation of agency shall be	effective	for purchases of com	ponent constru	uction mat	erials, taxable ser	vices and	leases and rentals
of tangible personal property for the	following	named construction	project:				
Construction Project		- 4 4			Contract Number		
This designation and acceptance of	agency i	s effective for the per	riod				
Beginning Date (mm/dd/yyyy)			End Date (mn	n/dd/yyyy)			
				_			
Purchases for the named project duidirectly by the governmental body. become the property of this government of any property, services, leases, or any party created under any construction contractor to submit payment to This contractor-agent is not author this governmental entity are requital entity. The undersigned hereb	Any maternent entity rentals materials materials materials to the vendo entitle to the vendo entitle for entitle to the vendo ent	erials purchased by to r. This government er ade by this designate tract related to this pu- lors of materials or so or delegate this pur- each contractor or s	his agent shal ntity, as princip of agent. This roject, includin ervices for the chasing agen sub-contractor	I immedia val, assum agreemen g specifica project. acy to oth who is	tely, upon the vertes direct liability to toes not void or ally any contracturers; separate of to purchase on	ndor's deli o the vend supersede al obligation designation behalf of	or for the agent, or for the payment to the obligations of on of the construc-
them. In order for a purchase for	an eligibl	e governmental enti	ty through a	designate	d agent to be el	igible for	sales tax exemp-
tion, the designation of agency m transaction.	ust be n	nade, accepted, and	d disclosed to	the ven	dor before or at	the time	of the purchase
Designation of A	Agency		TA TO THE OWN	Ac	ceptance of Ag	ency	
Signature of Authorized Designator		Date (mm/dd/yyyy)	Signature of Contra	actor or Subo	ontractor Authorized A	cceptor	Date (mm/dd/yyyy)
Name of Authorized Designator		1	Name of Contracto	r's or Subcor	ntractor's Acceptor		
Name of Governmental Entity		1	Name of Contracto	ŗ		-11-4/11	
Address			Address				
City	State	ZIP	Dity			State	ZIP
			5				

This designation of agency form, when properly executed by both the contractor and the governmental entity, shall serve as evidence of the sales tax exempt status that has been conferred onto the contractor. No other exemption certificate form is necessary to claim exemption from sales taxes. The agency agreement evidenced by this sales tax exemption certificate must be implemented at the time of contract execution with the governmental entity. The contract between the governmental entity and his agent must contain provisions to authenticate the conferment of agency.

IMPORTANT NOTICE TO ALL BIDDERS - BID REQUIREMENTS

A. LOUISIANA CONTRACTOR'S LICENSE FOR THIS PROJECT

Range of The Probable Construction Cost for Alternate No. 3:

B. PROBABLE CONSTRUCTION RANGES
Range of The Probable Construction Cost for Alternate No. 1:

Range of The Probable Construction Cost for Alternate No. 2:

Range of The Previous Contract Cap
(Public Work Maintenance Contract):

C. TIMELINES

Must be in the following category:

Except as where provided by law, Bidder agrees that this bid shall be legally binding and may not be withdrawn for a period of forty-five (45) calendar days after the scheduled closing time for receiving bids. In the event the Owner issues the Letter of Award (copy of adopted resolution awarding bid by Jefferson Parish Council) during this period, the bid accepted shall continue to remain binding pending execution of the Contract.

Bidder agrees to execute the ensuing Contract and will deliver applicable Bonds to secure the faithful performance thereof.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-913 of the Jefferson Parish Code of Ordinances.)

Upon full execution of the Contract and receiving a written notice to proceed, the Bidder agrees that all work shall be completed as follows:

As noted in the specifications

D. SALES TAX EXEMPTION

For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session – Louisiana Revised Statute 47:301(8)(c). Owner will furnish to contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Owner the amount of taxes not incurred.

In accordance with Resolutions 136352 and 136353, Bidder agrees to pay, as liquidated damages, the sum of \$300.00 for: (1) each consecutive calendar day after the agreed date of completion that the work remains substantially incomplete, or (2) each consecutive calendar day after			
substantial completion that the work has not been finally completed.			
In addition to, but not in lieu of the per diem liquidated damages, Owner shall also be entitled to recover from Contractor or Contractor's Surety additional liquidated damages as detailed in Resolutions 113646 and 113647. These additional liquidated damages may include, but are not limited to the following, in the amounts and for each of the items identified in the Supplementary Conditions:			
(1) Extended architectural and/or engineering fees \$ N/A ;			
(2) Extended Resident Project Representative fees \$ N/A ;			
(3) Extended construction management fees \$ N/A ;			
(4) Extended Owner's overhead and personnel expenses \$ N/A ; and (5) Owner's other costs directly related to the delay in completion beyond the Contract Times.			
Also, in accordance with Section 6.02, "Labor; Working Hours," whenever Contractor's work requires inspections in excess of the budgeted amount for inspection, Contractor shall reimburse Owner for the additional costs incurred by the Owner attributable to inspection of the contracted project in excess of the budgeted amount for inspections.			
In accordance with the terms of the Engineer's agreement with the Owner, the average hourly rate to be charged for resident inspection for this construction project is NA and the reasonable budget for such inspections is NA (the overtime rates shall be NA per hour). The cost of inspection in excess of this budgeted amount shall be assessed against Contractor's progress payments, all in accordance with LSA R.S. 38:2216(L)(2).			
F. METHODS OF BID SUBMISSION Online at no charge via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net . Registration and use of this site is free to Jefferson Parish vendors.			
G. ETHICAL STANDARDS AND COOPERATION WITH THE OFFICE OF THE INSPECTOR GENERAL, INCLUDING CONFLICTS OF INTEREST Vendor agrees by bid submission to comply with all provisions of Louisiana Law as well as compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, as published on http://ethics.la.gov and applicable Jefferson Parish ethical standards and Jefferson Parish Terms			

E.

and Condition.

LIQUIDATED DAMAGES

<u>Inspector General</u>: It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the inspector general in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19). Every parish contract and every bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program shall contain a statement that the corporation, partnership, or person understands and will abide by all provisions of JPCO 2-155.10.

Conflicts of Interest: Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

H. REQUIRED AFFIDAVITS

For convenience, all legally mandated affidavits have been combined into one form, entitled THE PUBLIC WORKS BID AFFIDAVIT. All bidders must submit with their bid submission, a completed, signed and properly notarized affidavit in its original format and without alteration in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration prior to, or at contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

I. BID REQUIREMENTS (BID DOCUMENTS, SPECIFICATIONS, BONDS, W-9 AND PAYMENT INFO)

Bidders must review the bid specifications and include any required documentation including but not limited to the LA Public Works Uniform Bid Form, Bid Security, Corporate Resolution or written evidence of signature authority, and the Public Works Affidavit. Pursuant to LA R.S. 38:2212(B)(3)(b), bidders shall also be responsible for providing any other documentation as required, i.e. federal grant documentation, etc. Please note that the payment and performance bonds must be supplied by the successful bidder at contract signing.

All vendors submitting bids should register as a Jefferson Parish vendor, if not already registered. Registration forms may be downloaded from http://purchasing.jeffparish.net and click on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

Bidders must comply with all provisions of the General Terms and Conditions as approved by Resolution No. 136352 and/or 136353. A copy of these terms and resolutions may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, Louisiana 70053. Bidders may also obtain a copy by visiting the Purchasing Department's webpage at www.purchasing.jeffparish.net and clicking on online forms.

<u>Bid Security</u>: Bidders shall provide bid security in the form of an electronic bid bond in the amount of five percent (5%) of the total bid price (Base Bid and any Alternates) (as per R.S. 38:2218). Such security will become the property of the Owner in the event the successful bidder fails or refuses to execute the Contract or fails to produce performance and payment bonds upon contract signing.

When submitting online, bidders must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.

Performance Bond: A performance bond is required in 100% of the contract amount and is due at the signing of the formal contract.

Payment Bond: A payment bond is required in 100% of the contract amount and is due at the signing of the formal contract.

J. INSURANCE REQUIREMENTS

All Bidders must submit with bid submission a current (valid) insurance certificate evidencing required coverages. Failure to comply will cause the bid to be rejected. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the low bidder will be required to provide final insurance certificates to the Parish which shall name the <u>Jefferson Parish</u>, its <u>Districts Departments and Agencies under the direction of the Parish President and the Parish Council</u> as additional insureds regarding negligence by the contractor for the Commercial General Liability and the Comprehensive Automobile Liability policies. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.

JEFFERSON PARISH REQUIRED STANDARD INSURANCE

WORKER'S COMPENSATION INSURANCE

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

☑ COMMERCIAL GENERAL LIABILITY

Shall provide limits not less than the following: \$1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

Bodily injury liability \$1,000,000.00 each person; \$1,000,000.00 each occurrence. Property Damage Liability \$1,000,000.00 each occurrence.

UMBRELLA LIABILITY COVERAGE

An umbrella policy or excess may be used to meet minimum requirements.

FOR CONSTRUCTION AND RENOVATION PROJECTS:

The following are required if selected. Such insurance is due upon contract execution.

OWNER'S PROTECTIVE LIABILITY
To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.
BUILDER'S RISK INSURANCE
The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may

INSURANCE DEDUCTIBLES - The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

K. INDEMNIFICATION

Bidder acknowledges that Bidder recovered the cost of any required insurance in the contract price as required by La.R.S. 9:2780.1(I) and that Bidder recovered any such cost for the purposes of insuring an obligation to indemnify Jefferson Parish, defend Jefferson Parish, or hold Jefferson Parish harmless and that Bidder's indemnity liability is limited to the amount of the proceeds that are payable under the insurance policy or policies that Bidder has obtained.

SPECIFICATIONS

JEFFERSON PARISH DEPARTMENT OF SEWERAGE SEWERAGE CAPITAL IMPROVEMENTS PROGRAM FOR

PREVENTATIVE MAINTENANCE (LINING)

OF EXISTING SANITARY AND STORM SEWERS,
INCLUDING SERVICE LATERALS AT SCATTERED

LOCATIONS IN JEFFERSON PARISH

1.0 GENERAL CONDITIONS:

1.01 Scope of contract work: The purpose of this contract is to provide means to perform replacement and repair of existing sewer lines and work incidental thereto; and, to supplement existing Sewerage Department work crews on day to day maintenance and emergency repairs. Actual quantities used may fall below or exceed the estimated quantities listed on the bid form. Work orders will be issued on an as needed basis, for repairs at various locations on the East and West Banks of Jefferson Parish. All work covered under this contract must conform to Jefferson Parish Engineering Department standard detail sheets, available at the Jefferson Parish Engineering Department.

Due to the nature of this contract, it may be necessary to make repairs on Emergency 24 hour/seven (7) days a week, nights, week-ends, and holidays. However, there will be no extra compensation for repairs performed during these events. The Contractor must have available two (2) contact employees, one primary and one back-up, on a 24 hour basis, to coordinate work initiation.

The contract will be awarded to the lowest responsible bidder complying with all provisions of this invitation, providing the bid is reasonable and that it is in the best interest of Jefferson Parish to accept.

The Parish of Jefferson reserves the right to accept or reject the bid in whole or part.

All job sites must be kept clean and free of all construction debris and related litter daily and upon completion of the job. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable materials must be removed from job areas daily. Precautions must be exercised at all times to

safeguard the welfare and safety of the general public, employees of Jefferson Parish, and other Parish officials.

The Contractor's State License shall be in the category of Municipal and Public Works Construction.

1.02 BONDS:

SURETY BOND: A 5% surety bond is required with bid submission. This shall be 5% of the bid total.

PERFORMANCE BOND: A 50% performance bond is required for this bid. The Performance Bond is 50% of the contract total and is due at the signing of the formal contract.

PAYMENT BOND: A 50% payment bond is required for this bid. The Payment Bond is 50% of the contract total and is due at the signing of the formal contract.

- 1.03 Familiarization with the work: Before bid submittal, each prospective bidder shall be familiar with the work, local labor conditions, and all laws, regulations, and other factors affecting performance of the work. Bidder shall carefully correlate Bidder's observations with the requirements of the contract documents, and otherwise be satisfied of the expense and difficulties for performance of the work. The submission of a bid will constitute a representation of compliance by the bidder. There will be no subsequent financial adjustment for lack of such familiarization.
 - 1.04 Pre-Bid Conference: A MANDATORY Pre-Bid Conference will be held at 10:00 a.m., on December 7, 2020 in the Jefferson Parish Purchasing Department, located at 200 Derbigny Street, Suite 4400, Gretna, LA 70053. All interested parties are invited to attend. All bidders must attend the Mandatory pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the Mandatory pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
- 1.05 Contract term: The contract term is for two (2) years.
- **1.06 Jefferson Parish General Specifications:** The general specifications for these contract documents are the new uniform set of general specifications of Jefferson Parish, under Jefferson Parish Council Resolution No. 113647. The resolution

containing the new uniform set of general specifications is not reproduced herein, however, bidders shall be presumed to have full knowledge of these general conditions. Copies are, at all times, available with the Clerk of Jefferson Parish Council.

- **1.07** Contractor will agree to commence contract work upon the date of contract execution.
- 1.08 Liquidated damages: Liquidated damages will be assessed in the amount of \$300 per day if the work order and restoration is not complete within the time frame stipulated in the work order or in these specs. If the Contractor should fail to complete issued work orders in a timely manner and to the satisfaction of the Parish, liquidated damages will be assessed, and the issuance of additional work orders will be withheld. If Contractor continually fails to perform work to the satisfaction of Jefferson Parish, the Parish reserves the right to terminate the contract, re-advertise, and re-bid the contract.
- 1.09 Pursuant to LSA R.S. 38:2248, Owner shall retain the following percentages of each progress payment until payment is due under the terms and conditions governing substantial completion or final payment.

Contract Amount	Retainage		
\$0 - \$1,000,000	10%		
\$1,000,000 or greater	5%		

1.10 Bids are to be submitted to: Jefferson Parish Purchasing Department Jefferson Parish General Government Building 200 Derbigny Street, Suite 4400 Gretna, Louisiana 70053

(Unless instructed otherwise)

1.11 Work Scheduling: Because of the nature of this contract, it may be necessary for the contractor to respond to emergencies immediately upon notification, within one (1) hour of call out.

The Contractor will be issued a work order to proceed with a "Line" or "Repair" item of work and at that time be furnished with the approximate location and general description of the work to be performed.

The work orders must be prioritized and work shall commence as follows:

A. Service Line Repair:

The time requirements for the commencement and completion of repair and restoration work ordered for <u>service line repair</u> is as follows:

	Work Order to Commence	Repair to be completed
Emergency Repair notification	work as required until	within one hour of
		repair is complete
Priority Repairs	within 24 hours of notification	within 10 working days
Non-priority Repairs	within 10 days of notification	within 30 calendar days

B. Mainline Sewer Repair:

The time requirements for the commencement and completion of repair and restoration of mainline sewer work ordered are as follows:

	Work Order to Commence	Repair to be completed
Emergency Repair	S	within one hour of notification work as required until repair is complete
Priority Repairs	within 24 hours of notification	within 10 working days

For mainline sewer repair including CIPP, which is considered Non-Priority, the following schedule will apply for completion of the work:

Work order Footage	Work to Commence	Work to be Complete
0 feet to 1,000 feet	within 5 days	within 21 days
1,001 feet to 2,500 feet 2,501 feet to 5,000 feet	within 5 days within 10 days	within 28 days within 35 days
5,001 feet to 7,500 feet	within 10 days	within 49 days

C. General:

NOTE: All restoration for any of the above types of repairs listed in A or B must be completed within 42 days after the repair has been completed. Emergency repair work must be completed as soon as possible, and work is to continue until complete. The Contractor shall work 24 hours a day until the work is complete for Emergency Repair work.

Emergency response will be directed by Department of Sewerage Personnel. All others within 48 hours of issuance, or as directed.

Failure of the Contractor to meet the above time constraints will result in the following:

- a. Have the work performed by others and back charged to the Contractor; or
- Persistent failure of the contractor to meet the response deadlines (3 occurrences or more) may lead to contract termination. Notification of deficient performance will be by certified mail.
- c. Liquidated damages in the amount of \$300 per day for each day the work order is not complete within the specified time frame.

The failure of Jefferson Parish to assert a breach for the failure of the Contractor to perform at anytime shall not be construed to be a waiver of Jefferson Parish's rights hereunder.

Each work order will designate a job number and all correspondence, billing, etc. pertaining to the work shall reference this job number designation.

If the Contractor does not diligently proceed with the work, the issuance of additional work orders will be withheld.

1.12 Procedure for New Product Consideration:

The primary objective of this contract is to clean, video inspect, and to rehabilitate sewers on which repairs will be very expensive and/or disruptive; i.e. the critical sewers. Preventive maintenance on these sewers will greatly reduce the risk of such failures occurring. The secondary objective of this contract is to institute a systematic, long-term plan to reduce excessive infiltration/inflow into the sewer system, and preserve the structural integrity of the sewer system. It is also the objective of the Jefferson Parish Department of Sewerage to maintain 100% of the existing sanitary sewer pipes' flow capacity, when possible, after completion of rehabilitation, and to minimize the public exposure to disruption, inconvenience, and health hazards. For these reasons, certain methods of rehabilitation have been pre-selected as being in the best interest of Jefferson Parish, and it is critical that both the Product and the Installer have the ability to meet or exceed all requirements of the Department of Sewerage.

1.12.1 New Product Consideration:

A. Minimum Entry Policy:

As a public agency, Jefferson Parish has a responsibility to the taxpayers to avoid the expenditure of public funds for researching or developing commercial products, and to avoid competition with private laboratories for developmental testing of commercial products. The following section covers the minimum standards, which all new pipe or manhole rehabilitation processes, not previously accepted by the Department of Sewerage, must meet.

A bidder may propose a proven alternate Product and installing company instead of the procedures described in the Technical Specification for consideration as "equal". Such a proposal will be accepted by the Parish, if it has been approved as an equal to the methods described in this Specification and satisfactory evidence has been submitted to the Parish that the Product and Installer complies with the New Product Qualifications requirements. This approval must come from the Jefferson Parish Department of Sewerage.

1.12.2 Requirements for the Pipe Lining Product:

- A. Any proposed Product must be capable of rehabilitating sanitary sewer mainlines from 6 inch to 60 inch diameter, 4 inch and 6 inch sanitary sewer laterals, and storm sewers from 15 inch to 60 inch diameters. The Product must be of the cured-in-place type.
- B. Any proposed Product must also meet the following requirements:
 - The liner must restore structural integrity of lightly or heavily deteriorated sewer pipe of all common types, Concrete, Vitrified Clay, Iron, PVC, etc.
 - **2.** All rehabilitation of mainlines and laterals must be done completely trenchless-no excavation
 - 3. The installed liner must be tight-fitting throughout its length.
 - **4.** The liner must be capable of being installed around bends and offsets in the pipe, and be capable of diameter transitions within a manhole segment.

- The liner must be capable of being installed in a wide variety of wall thickness, to meet the variety of field conditions encountered in Jefferson Parish.
- 6. The lined pipe must maintain at least 100% of the flow capacity of the host pipe when new. An in-ground independent third party test shall be provided to support this.
- 7. The liner must meet or exceed all physical property standards, flow, corrosion, design life, installation, other quality standards, as exhibited by the specified Product, or as otherwise described herein, or listed below.
- C. Sewer rehabilitation Products submitted for consideration must provide Third Party Test Results supporting the long-term performance and structural strength of the Product, and such data shall be satisfactory to the Director of the Department of Sewerage and/or PWIRS. Test samples shall be prepared so as to simulate installation methods and the trauma of Product installation. Laboratory samples will not be acceptable.
- D. Short-term tests can be extrapolated using actual short-term test data and applicable ASTM Standards for plastic pipe.
- E. For a Product to be considered for approval, a minimum of 500,000 linear feet, or 2,000 mainline sections, of successful wastewater collection system installations, must have been completed in the U.S. Included within the footage experience must be a least 25,000 linear feet of 24 inch or larger diameter installations, and at least 5,000 linear feet of successful 42 inch, or larger diameter installations.

1.13 Requirements for the Installer:

- A. To be considered as an acceptable equal, any proposed installing company (Installer) must meet the following minimum requirements:
 - 1. Prospective Installer must be willing to install a test section in a minimum of 300 linear feet of 8-inch sanitary sewer main line for review by the Director of the Department of Sewerage and/or PWIRS. This test will be at no charge to Department of Sewerage, and will be used to evaluate installation techniques; installation associated material trauma; public disruption compatibility with current Jefferson Parish standards; and all project requirements as detailed throughout this specification. A restrained sample of the installed material will be tested as per modified ASTM D-790 and the results submitted to the Director of the Department Sewerage and/or PWIRS for review prior to any approval. Contractor shall prepare and submit both pre-rehabilitation and post-rehabilitation

video inspections of the test main line section prior to the installation of the proposed service connection rehabilitation Products.

This test line section must include a minimum of six service connections. The prospective Installer shall re-establish all service connections to the satisfaction of the Director of the Department of Sewerage and/or PWIRS.

The prospective Installer must also rehabilitate by CIPP two laterals by each of the three (3) lateral reconstruction methods identified in the Technical Specifications in the mainline test section described above.

If the test section is successfully installed to the satisfaction of the Director of the Department of Sewerage and/or PWIRS, and the Installer is awarded the bid, the Installer will be paid for this test at the unit prices bid in the Contract.

- 2. The Installing Company must satisfy all insurance and bonding requirements of Jefferson Parish.
- 3. The Installer shall have internally restored a variety of service laterals, including both 4-inch and 6-inch connections of all major pipe types including, but not limited to vitrified clay, PVC, and concrete. To be considered for approval, the Installer shall have internally restored a minimum of 1,000 service connections.
- 4. The proposed CIPP lateral rehabilitation Product must also have been installed in a minimum of 500 service laterals by the proposed Installer, with at least 250 of these installed from the mainline, and 250 installed from the cleanouts.
- 5. References, for a new product, must be submitted with the bid, for review and verification by the owner.
- Proposed Installer shall submit statement as to country origin of all materials used to produce the final installed Product with the bid.
- 7. Proposed Installer shall provide detailed installation procedures and specific procedures for rehabilitation of mainlines, rehabilitation of service laterals, internal re-establishment of laterals, and installation of new service connections on lined pipe with the bid.
- 8. Proposed Installer shall submit a narrative description of typical modes of failure for the proposed Product with the bid. This narrative should include typical and suggested means of repair, along with brief description of both the causes of the

potential failure and effectiveness of proposed repairs.

- 9. Proposed Installer shall submit a narrative description of limitations of the proposed Product with the bid. Narrative should include a minimum of suitable diameter ranges, degree of host pipe integrity required, job site installation limitations, depth limitations, required obstacle removal, point repairs, etc.
- **10.** Proposed Installer for new product should also submit at least five (5) Inflow/Infiltration reduction case studies documenting quantifiable results of rehabilitation with the proposed Products with the bid.

1.14 Data Submittal:

All requests and data submittals for consideration of new Products and Installers as "equal" shall be submitted with the bid.

1.15 Emergency Personnel Requirements:

The work demands of this contract will require the Contractor to be able to respond to emergencies within one hour of notification.

1.16 Scheduling of Work:

Work under this contract will be assigned by written Work Orders, which will include available maps and instructions for the exact work to be performed. The maps will reflect the approximate location and existing conditions of utilities, if available.

After receiving the Work Order, the Contractor shall contact PWIRS and/or Director of the Department of Sewerage, as provided to the Contractor in writing, to arrange for inspection of the work. No work shall be performed until a starting time has been agreed upon between the Contractor and PWIRS and/or Director of the Department of Sewerage. The starting time shall be as stated in the Agreement. The time of completion for each Work Order shall be as stipulated in the Agreement. Should an emergency situation interrupt any work in progress by the Contractor, or make it impossible for the Contractor to start work on a Work Order, then the Contractor will not be held liable for failing to either complete the work in progress or begin the new work within the specified time. Also, in case of an emergency, Jefferson Parish may stop scheduled work and/or postpone the work to a later date. Additionally, Director of the Department of Sewerage and PWIRS shall not issue Work Orders in such quantity that would make it improbable for the Contractor to begin work within the specified time.

The Contractor performing work under this contract shall be required to coordinate his operations with PWIRS and/or Department of Sewerage personnel. The Contractor shall notify residents by (fliers, door hangers, etc.) a minimum of 24 hours prior to commencing work on any work order issues by the Owner. Additional notification periods for various items of work can be found in the specifications.

Once work has begun at a specific location, the Contractor must diligently pursue the work to be done until the work is completed. Director of the Department of Sewerage and/or PWIRS reserves the right to order the Contractor to dispatch additional men and equipment to the job site if, in the opinion of the PPWIRS and/or Director of the Department of Sewerage, work is not proceeding in an orderly manner. This time limit for completion of the ordered work will be strictly enforced. Should the work not be progressing on schedule, Director of Sewerage and/or PWIRS may order the Contractor to employ additional crews in order to complete the work on time.

The PWIRS and/or Director of the Department of Sewerage have the right to require the Contractor to remove incompetent employees from the jobsite. The cost shall be incidental to all bid items.

1.17 Work by Others:

Unless required to be performed, under this contract to expedite the work, all point repairs required to facilitate Contractor will be performed under a separate contract designated by Jefferson Parish.

Some manholes may have been paved over or otherwise covered up, may not exist, may not be correctly shown on the Parish plans, or may be shown as a clean-out, or vice versa. The Contractor shall make a reasonable, good faith effort to locate the manholes. The uncovering and raising of manholes may be performed by Jefferson Parish personnel, or the Parish's designated Contractor. In the event that a manhole cannot be located, the Contractor shall complete an "Unable to Complete Assignment" form, and turn it in to the inspector.

1.18 Coordination of Work:

The Contractor performing work under this contract shall be required to coordinate his operations with all Jefferson Parish Public Works Departments, as may be required.

1.19 Special Project Requirements:

In order to meet the work demands of this contract and to supply the data collected by the Contractor under this contract to the Director of the Department of Sewerage and PWIRS in the required format, the Contractor submitting the lowest responsible bid will be required to utilize the current versions of the Lucity sewer system management program. This program is to be used by the Contractor to input and process the data collected under this contract, per Section 24 and 25.

The Contractor will be required to submit proof that at least one of the Contractor's employees is proficient in the use of the Lucity sewer system management program within 60 days after the contract is awarded.

TECHNICAL SPECIFICATIONS SECTION 1

SCOPE OF WORK

1.01 The work to be performed on this contract shall consist of cleaning, television inspection, and root removal from gravity sanitary sewer and gravity drain lines; cleaning manholes and wet wells, reconstruction of sanitary sewer and drain pipes by installing a cured-in-place (CIPP), using one of three approved processes, Insituform, National Liner, LMK, or approved alternate. Also included is the rehabilitation of sewer manholes, wet-wells, force mains, mainlines, and laterals.

1.02 COMPUTER SOFTWARE REQUIREMENTS

The Owner is utilizing certain licensed computer software programs to assist in management of the sanitary sewer system. The Contractor will need to utilize a system compatible to Lucity Wastewater Collection Management System and Peninsular Technology, Inc. to electronically store all data obtained from evaluation and rehabilitation tasks. All costs for obtaining the required computer systems shall be at the expense of the Contractor. PWIRS will provide the Contractor with any special instructions regarding the use of the computer systems, per Section 25.

Upon request by the PWIRS, not more than once a week, the Contractor shall electronically submit all field inspection data collected during that week. This shall include smoke test data, television inspection, manhole inspection, clearing, lining work, etc. All data submitted must be grouped by individual work order number, by sewer lift station number, and manhole number. The cost for performing this shall be incidental to the related bid items.

TECHNICAL SPECIFICATIONS SECTION 2

MEASUREMENT AND PAYMENT

2.01 GENERAL:

Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work. This is all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction. No separate payment will be made for any item that is not specifically set forth in the Bid Schedule. Therefore, all costs must be included in the prices named in the Bid Schedule for the various appurtenant items of work.

2.02 ESTIMATED QUANTITIES:

This is a unit price contract. The quantities shown on the "Bid Form" are for comparison of bids only. Items of work performed under this contract will be on an as needed basis. Actual quantities may vary significantly from the quantities stated on the Bid Form. Quantities shown may be increased, decreased, or not used at all.

2.03 <u>CLEANING SANITARY SEWER LINES:</u>

- A. Measurement: Measurement for payment of cleaning sanitary sewer pipe, storm drains, and associated manholes shall be per linear foot, with measurement being made between centerlines of consecutive manholes for the line segments and manholes cleaned.
- Payment: Payment for cleaning sanitary sewer lines, storm drains, and associated manholes shall be made at the unit bid price per linear foot, for various pipe sizes and debris level, without regard to pipe type. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein, and shall include all costs associated with debris removal and disposal.

2.04 COMBINATION VACUUM/CLEANING TRUCK

- A. Measurement: Measurement for payment for combination/vacuum cleaning truck will be per hour required to complete the task specified for each individual work order.
- B. Payment: Payment for combination vacuum/cleaning truck shall be made at the unit bid price per hour, and shall constitute complete compensation for all labor, materials, and equipment required to complete the item of work, as specified herein, including the disposal of the debris removed.

2.05 CLEANING STORM SEWER LINES:

- A. Measurement: Measurement for payment of cleaning storm sewer pipe and associated catch basins or manholes shall be per linear foot, with measurement being made between center lines of consecutive structures for the line segments and structures cleaned.
- B. Payment: Payment for the cleaning of storm sewers and associated catch basins and manholes shall be made at the unit bid price per linear foot for various pipe sizes and debris level, without regard to pipe type. Payment shall constitute full compensation for all labor, materials, and equipment necessary to complete this item of work, as specified herein.

2.06 ROOT REMOVAL:

- A. Measurement: Measurement for payment of root removal from sanitary or storm sewers will be made per linear foot. PWIRS and/or Director of the Department of Sewerage, or a designated representative will determine the length of the sections in which the roots are required to be removed.
- B. Payment: Payment for root removal will be made at the unit bid price per linear foot for the various sizes of pipe. This shall constitute full compensation for all labor, materials, and equipment necessary to complete this item, as specified herein.

2.07 RADIAL VIEW COLOR CAMERA EVALUATION VIDEO:

- A. Measurement: Measurement for payment of radial view color camera evaluation video will be made per linear foot, with measurement being made between centerlines of consecutive structures for the line segments televised. The use of a radial view color camera will be specifically directed by PWIRS and/or the Director of the Department of Sewerage.
- B. Payment: Payment for radial view color camera evaluation video will be made at the unit bid price per linear foot. This shall constitute full compensation for all labor, materials, and equipment necessary (including first setup) to complete this item, as specified.

2.08 REMOTE ILLUMINATION OF 15 INCH THRU 60 INCH PIPE:

- A. Measurement: Measurement for payment of remote illumination pipe inspection will be made per each pipe section inspected. This item will typically be performed on pipe sections of less than fifty (50) feet in length.
- **B.** Payment: Payment for remote illumination pipe inspection will be made at the unit bid price for each pipe section inspected.

2.09 ADDITIONAL SET UP FOR TELEVISION INSPECTION:

- A. Measurement: Measurement for additional set up for television inspections will be made per each additional setup which is required, due to an obstruction in the line being televised. Initial setup for inspection required for normal operation will not be measured separately, nor included in this item.
- B. Payment: Payment will be made at the unit bid price per each additional setup required. Separate payment will be made for the actual linear footage of line televised due to a "reverse Setup".

2.10 <u>LATERAL CLEANING AND TELEVISING FROM MAINLINE OR CLEANOUT ACCESS POINT:</u>

- A. Measurement: Measure for television inspection of existing sewer laterals shall be on a per each basis at the appropriate contract unit price. The price shall include furnishing all labor, materials, and equipment required to clean and complete television inspections, and include appropriate software and report required in mainline inspection.
- **B.** Payment: Payment will be made at the unit bid price per each setup and inspection required.

2.11 <u>INSTALLATION OF CURED IN PLACE PIPE (CIPP) FOR MAIN LINES:</u>

- A. Measurement: Measurement for payment of installation of CIPP will be made per linear foot, as measured between centerlines of consecutive structures for the line segment replaced.
- B. Payment: Payment for CIPP insertion will be made at the unit bid price per linear foot for the sizes and thickness of CIPP installed, in accordance with these specifications. Payment for installation of CIPP shall be for pre-inversion cleaning, pre and post inversion television inspection, wet out of liner, curing of liner, cutting ends, sealing CIPP in manholes, testing, and cleanup; and, in accordance with the unit bid prices for the various pipe sizes. Additional compensation will be made for initial cleaning and pipe inspection, in accordance with the unit bid prices for these items.

Item No. 27 will be used for 8 inch vitrified clay pipe only. Item No. 28 will be used for all other types of 8 inch pipe.

There will be no direct payment for sewer bypass up to, and including the first 4 inch pump. If more than one 4 inch pump or a larger pump(s) is/are required to adequately handle the flow, the Contractor will be paid at the unit bid prices for each size pump setup, and at the appropriate operating rate approved by the PWIRS and/or Director of the Department of Sewerage.

There shall be no direct payment for pre-television inspection of sewer mainline prior to lining. This cost shall be incidental to the work.

Initial pipe cleaning and inspection is performed to determine the suitability of the pipe for rehabilitation. Pre-television inspection is performed immediately prior to the CIPP installation to assure the existing pipe is clean and ready for installation. Should PWIRS provide a television inspection of the pipe, the television inspection shall not be more than four (4) months old.

2.12 ADDITIONAL THICKNESS FOR CIPP:

A. Measurement: Measurement for payment of installation of additional thickness of CIPP will be made per linear foot, as measured between centerlines of consecutive structures for the line segment lined with additional thickness.

B. Payment: Payment for additional thickness of CIPP will be made at the unit bid prices per linear foot for the sizes and additional thicknesses of CIPP installed, in accordance with these specifications. Payment for pre-inversion cleaning, pre and post inversion television inspection, wet out of liner, insertion of liner, curing manholes or wet-well, testing, cleanup, and bypass pumping shall be paid for under separate bid items. Payment for this item will only be made if the additional thickness is approved by the Owner, prior to insertion.

2.13 <u>CIPP RECONSTRUCTION OF SERVICE LATERALS:</u>

- A. Measurement: Measurement for payment of CIPP Reconstruction of service laterals will be on a per each basis for each performed, up to 50 feet in length and on a linear foot basis for lengths which exceed the initial 50 feet (with the exception of a "Short segment" reconstruction from mainline, which shall be defined as the installation of a "top hat" seal and lateral lining up to 6 feet in length). The "short segment" reconstruction shall include a standard cut of the lateral at the mainline.
- B. Payment: Payment for CIPP Reconstruction will be made at the unit bid price, either on a per each basis for the range specified, or a linear foot basis for lengths in excess for the range specified, for CIPP installed in accordance with these specifications. Payment for CIPP Reconstruction shall be for pre-inversion cleaning, pre-inversion inspection, wet out of CIPP, insertion of CIPP, curing of CIPP, cutting ends, sealing CIPP in cleanouts and mainline, testing, and cleanup. This is in accordance with the unit bid prices for the various pipe lengths. Additional payment for "Setup for Lateral Reconstruction from Mainline by CIPP" will be made for each "Setup" of equipment. The actual number of laterals reconstructed from this "Setup" may vary from 1 to 20.

2.14 <u>SEWER FORCE MAIN REHABILITATION BY REINFORCED CURED-IN-PLACE PIPE (RCPP):</u>

- A. Measurement: Measurement for payment of installation of RCPP will be made per linear foot, as measured between centerlines of consecutive structures or access points for the line segment repaired. End seals shall be on per each basis.
- B. Payment: Payment for RCPP insertion will be at the unit bid price per linear foot for the sizes and thickness of the RCPP installed, in accordance with these specifications. Payment shall include the pre-inversion cleaning, pre and post inversion video inspection: wet-out, insertion, curing, and end cut

of the RCPP; testing, cleanup, and all required end seals. Initial cleaning shall be compensated in accordance with the unit bid prices for the closest diameter sewer cleaning pay items.

2.15 <u>SERVICE RECONSTRUCTION/REPLACEMENT BY EXCAVATION:</u>

A. Measurement: The unit bid price for Service Reconstruction/Replacement by excavation shall be measured per each. Reconnection by excavation method shall include the stack, and up to eight (8) feet of service line, as necessary. Measurement shall also be based on the various depths in increments of zero (0) up to six (6) feet; over six (6) feet to ten (10) feet; and over ten (10) feet deep, for all types and sizes of sewers, as shown.

Depth of Bury is to measure from Natural Ground Level to the top of the Sanitary Sewer Main at the Point of Reconnection. The minimum trench width shall be three (3) feet.

One or more connections discharging into a common point shall be considered as one house/building service connection. The Contractor shall not be allowed to increase the number of service reconnections. This item also includes, as incidental to the work, field locating all live service connections from the ground in portions of the sanitary sewer that cannot be negotiated with the TV camera, or where the camera was submerged.

B. Payment: Payment for service reconnection excavation shall be made at the contract unit bid price per each, based on various depth increments. Payment shall be full compensation for locating service connections, material, sheeting and bracing, dewatering, labor, equipment, and incidentals necessary to provide a complete and accepted service reconnection.

2.16 SERVICE LINE REPAIR:

A. Measurement: Measurement for the work items listed below will be per each work item completed and accepted, or on a linear foot basis for lengths which exceed those indicated. The measured quantity shall include, but not be limited to, sheeting and shoring, repair of service line, removal and replacement of sewer features, and any other incidentals necessary to complete the various work items. Pavement replacement will be paid under separate pay items.

B. Payment: Payment for service line repair shall be made by the unit price bid per each repair made for all sizes of service lines for all depths. The minimum length of service line point repair shall be eight (8) feet. The minimum trench width shall be three (3) feet. No separate payment will be made if the work is done within the limits of service line reconnection.

Payment for main line point repair shall be made by the unit price bid per each repair for varying depths. Depth of repair is determined by averaging the invert elevation of the sewer line at the upstream and downstream manholes of the repair. The pay length of the per each repair shall be eight (8) feet. Beyond Point Repair will be paid per linear feet for each repair, which exceeds eight (8) feet in length.

All pipe fittings, adapters, concrete collar, bedding, and removal and replacement of grass sodding required shall be considered incidental to service line repair.

If no pay item is included for any work required to properly complete a service line repair as specified, the cost to perform said work, including any required removal and replacement of materials, shall be considered incidental to the service line repair.

Payment will be made under:

- 63. Repair/Adjust Cleanout Per Each
- 64. Installation of Sewer Cleanout Type 1 Per Each
- 65. Replace Section of Service Line Per Each
- 66.-68. Restore 8 inch 10 inch Main by Point Repair Per Each
- 69.-71. Restore 8 inch -10 inch Main beyond Point Repair Per Linear foot
- 130.-131. Restore 6 inch 18 inch Sewer Force Main by Point Repair –per each

2.17 <u>RE-POINT EXISTING SEWER MANHOLES OR WET WELL:</u>

- A. Measurement: The measurement for Re-pointing Existing Sewer Manholes or Wet Wells will be by the square foot manhole surface re-pointed.
- B. Payment: The actual quantity of manhole grouted, as measured above, will be paid for the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, material, and incidentals necessary to complete this

item of work.

2.18 CHEMICAL GROUT TO FILL VOIDS AND STOP LEAKS IN STRUCTURES:

- A. Measurement: The measurement for Chemical Grout to Fill Voids and Stop Leaks in Structures will be by the gallon injected into void or leak, measured by metering the amount of chemical grout pumped for injection.
- B. Payment: The actual quantity of gallons injected, will be paid for the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, material, and incidentals necessary to complete this item of work.

2.19 SEWER MANHOLE/WETWELL REHABILITATION BY CEMENTITIOUS LINING:

- A. Measurement: Measurement for rehabilitation of sewer manholes or wetwells by cementitious lining will be by the 50 lb. bag of material used.
- B. Payment: Payment for rehabilitated manholes shall be made per 50 lb. bag. Payment shall include all materials, labor, grout, equipment, and related work items to rehabilitate a manhole/wetwell. Locating, uncovering, and cleaning the manholes; photographic documentation, preparation of forms and benches; and patching or plugging leaking joints and voids shall be considered incidental to manhole/wetwell wall rehabilitation. Photographic documentation must be submitted prior to requesting monthly payment.

2.20 MANHOLE REHABILITATION

A. Measurement:

- 76. Manhole Cover Adjustments (Street or Easement) Per Each
- 77. Rebuilding Manhole Bench/invert Per Each
- 78. Remove and Replace Manhole Cone Per Each
- 79. Remove and Replace Manhole Wall Per Vertical Foot
- 80. Repair Manhole/Line Connection Per Each
- 81. Replace Manhole Cover and Casting Per Each
- 82. Install Force Main Discharge T/Turndown Per Each

B. Payment:

1. Manhole Cover Adjustments:

Elevation adjustment to the top of the existing manholes shall be paid per each manhole cover raised/lowered. This item shall include labor, material, etc. required to locate, excavate, and adjust the manhole and/or reset the frame utilizing riser rings and/or grout to the desired level.

2. Rebuilding Manhole Bench/Invert:

The quantity of this item shall be measured and paid per each to rebuild the bench and invert of an existing manhole. The unit price for this item shall be full compensation for providing all labor, materials, equipment, tools, and incidentals necessary to completely build a bench and invert within an existing sanitary sewer manhole, in accordance with these specifications. The unit bid price shall include all preparatory work, protection of existing equipment and piping, and confined space entry.

3. Remove and Replace Manhole Cone:

Remove and Replace Manhole Cone shall be paid for at the contract unit bid price per each, which shall include grouting/sealing and any other materials, labor, equipment, and incidentals necessary to complete this item.

4. Remove and Replace Manhole Wall:

Remove and replace Manhole Wall shall be paid for at the contract unit bid price per vertical foot, which shall include grouting/sealing and any other material, labor, equipment, and incidentals necessary to complete this item.

5. Repair Manhole/Line Connection:

Repair Manhole/line Connection shall be paid for at the contract unit bid price per each, which shall include testing and sealing with grout, and any other material, labor, equipment, and incidentals necessary to complete this item.

6. Install Force Main Tee/Turndown:

Installation of 4 inch -12 inch diameter Tee with cap on top and turndown internal to manhole. Drop leg shall extend to the manhole invert with a discharge window near the bottom. Note, this may change in the field by changing the location of the cap.

2.21 <u>RE-OPENING SERVICE CONNECTIONS:</u>

- A. Measurement: Measurement for payment of reopening the existing service connections from the interior of the pipe shall be per each internal service reconnection of the type indicated.
- B. Payment: Payment will be made at the unit bid price per each for remote cutting with brush to re-open service connections. This shall constitute complete compensation for all labor, equipment, and materials required to satisfactorily complete this item of work, as specified herein.

2.22 INTERNALLY TRIM PROTRUDING HOUSE CONNECTIONS:

- A. Measurement: Measurement for payment of internally trimming protruding house connections shall be per each connection trimmed. This item shall include all costs associated with set-up and trimming of the connections. This work will only be done upon prior approval of PWIRS and/or Director of the Department of Sewerage.
- **B.** Payment: Payment will be made for each connection trimmed at the unit bid price for the item of work, as measured above.

2.23 SET-UP AND OPERATION OF BY-PASS PUMPS:

A. Measurement: Separate measurement will be made for set-up and operation of by-pass pumps. These items are in addition to the minimum by-pass pumping requirements of other bid items and will only be allowed upon prior approval of PWIRS and/or Director of the Department of Sewerage. Each set-up will be measured separately, and will be made for each by-pass pump set up and subsequent removal. This shall include all level controls, installation of up to 100 feet of discharge force main, up to 60 feet of suction piping, and a full tank of fuel. If additional force main is required to reach the designated discharge point, this additional force main will be measured by the linear foot and be paid for at the appropriate "Extension of Force Main" pay item for the pump size.

Operation of by-pass pumps will be measured for the operation of each size of by-pass pump bid and will be made in accordance with the following schedules:

- 1 Day (DY) = 24 hours
- 1 Week (WK) = 3 days through 7 days
- 1 Month (MO) = 3 weeks; 21 days through 31 days
- B. Payment: Payment for set-up of the by-pass pumps will be at the unit bid price per each for each size required. The item will only be used for pumping beyond the minimum requirements of other bid items. Payment for operation of each size pump shall be at the daily, weekly, or monthly unit bid prices. Payment for operation of by-pass pumping will constitute full payment for the day to day operation of each pump, including fueling and daily checks on operation. Payment for extension of force main shall be per linear foot as measured above.

2.24 REMOVE AND REPLACE PORTLAND CEMENT CONCRETE:

- A. Measurement: The measurement for Removal and Replacement of Portland Cement Concrete Roadway will be by the square yard.
- B. Payment: The actual quantity of applicable roadway removed and replaced will be paid at the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, materials, wire mesh, if required, replacement of signing and striping, and any other incidentals necessary to complete the applicable item of work.

2.25 REMOVE AND REPLACE ASPHALTIC CONCRETE ROADWAY PLACE AND REMOVE TEMPORARY ASPHALTIC CONCRETE ROADWAY:

- A. Measurement: The measurement for Removal and Replacement of Asphaltic Concrete Roadway, the Placement and Removal of Temporary Asphaltic Concrete Roadway will be by the square yard.
- B. Payment: The actual quantity of asphaltic roadway removed and replaced within the authorized pay limit as shown on the drawings and indicated in the specifications, will be paid for at the unit bid price, This price and payment will constitute full compensation for furnishing all labor, equipment, materials, and incidentals necessary to complete the item of work. Should the thickness of the existing asphalt pavement exceed the six-inch (6") asphalt concrete minimum thickness required by the standard detail, the Contractor shall match the existing pavement. Payment for the additional thickness satisfactorily placed will be pro-rated, based upon the unit bid price of this item of work. For each additional inch of thickness satisfactorily placed, the Contractor will be paid an additional one-sixth (1/6) of the unit price of the pay item. Temporary Asphaltic Roadway will be 2 inches thick. Payment for any additional thickness of temporary asphalt will be pro-rated based upon the unit bid price for this item of work. Temporary asphalt shall be marked "TEMPORARY" in bright yellow paint.

2.26 REMOVE AND REPLACE CONCRETE DRIVEWAY:

- **A.** Measurement: The measurement for Removal and Replacement of Concrete Driveways will be by the square yard.
- B. Payment: The actual quantity of applicable driveway removed and replaced will be paid for at the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, materials, wire mesh, saw-cutting, excavation, back-fill, expansion joint material, removal of the existing driveway, and any other related miscellaneous items, necessary to complete the applicable item of work.

2.27 REMOVE AND REPLACE SIDEWALKS:

- A. Measurement: The measurement for Removal and Replacement of Sidewalks will be by the square yard.
- B. Payment: The actual quantity of applicable sidewalk removed and replaced will be paid for at the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, materials, reinforcement (if required), and shall include excavation, backfill, expansion joint materials, and incidentals (i.e. saw-cutting and other related miscellaneous items) necessary to complete the applicable item of work.

2.28 SITE SPECIFIC TRAFFIC CONTROL DEVICE PLAN:

- A. Measurement: Measurement of payment for development of each plan shall be made on a per each basis for each location directed by PWIRS and/or Director of the Department of Sewerage.
- B. Payment: Payment for developing Site Specific Traffic Control Device Plans in accordance with the requirements of the specifications shall be made at the unit bid price per each. The unit price shall be considered full compensation for this item. It shall include all labor, materials, Engineering Services, and any other services required for development of the Plan.

2.29 TRAFFIC CONTROL DEVICE SET-UP:

- A. Measurement: Measurement for payment of each set-up shall be made on a per each basis for each location directed by PWIRS and/or Director of the Department of Sewerage.
- B. Payment: Payment for completing each Traffic Control Device Set-up shall be made at the unit bid price per each. This set-up shall be in accordance with the Site Specific Traffic Control Device Plan, previously approved by PWIRS and/or Director of the Department of Sewerage.

2.30 TRAFFIC CONTROL DEVICE OPERATION:

- A. Measurement: Measurement for payment shall be made on a "per day" basis. A day shall be considered 24 continuous hours of operation. This shall be used only as directed by the Project Manager and/or Director of the Department of Sewerage.
- B. Payment: Payment for each "day" of operation shall be considered full compensation for maintaining the approved traffic control device plan. Maintenance shall include all necessary labor, equipment, materials, traffic engineering services (as required), and other incidentals required. Payment for each fraction of a day will be made as follows: Payment for operation for over 12 to 24 hours will be considered a full day. Payment for 1 to 12 hours will be considered a half day.

2.31 TRAFFIC FLAGMAN:

- A. Measurement: Measurement for payment shall be made on a unit price basis per hour required to fulfill the requirements of the Traffic Control Device Plan.
- B. Payment: Payment for providing a traffic control flagman shall be made at the unit bid price per hour, as authorized by PWIRS and/or Director of the Department of Sewerage. Payment shall constitute full compensation for all labor, materials, travel expenses, supervision, and related items necessary to complete each day of implementation or training as dictated by the the Director of the Department of Sewerage.

2.32 DATA ENTRY CLERK:

- A. Measurement: Measurement for payment shall be made on a per hour basis for providing data entry services.
- B. Payment: Payment shall constitute full compensation for all labor, supervision, and related items necessary to complete the item as specified.

2.33 <u>SANITARY UTILITY SEWERAGE FORCE MAINS – HORIZONTAL DIRECTIONAL DRILLING:</u>

- A. Measurement: Measurement for payment shall be for rehabilitation of sewer force main by installation using High Density Polyethylene Pipe (HDPE). Method shall be made by linear foot as measured between centerlines of drilling pits for the line segments replaced.
- B. Payment: Payment for sewer force main by installation using High Density Polyethylene (HDPE) shall be made at the unit bid price per linear foot for the sizes specified, in accordance with this specification. Payment shall be for pre and post installation video inspection and cleaning, fusing of pipe, the necessary insertion pits, excavation and backfill, and tie-in to existing force mains or structures. Surface restoration shall be paid under separate bid items.

2.34 <u>UNFORESEEN EMERGENCIES:</u>

A. MEASUREMENT: Measurement for unforeseen emergency work will be made on an as incurred basis for items 148-174. The cost of materials used in the performance of emergency work, if not otherwise covered by existing bid items, or supplied by Jefferson Parish, will be measured and paid for at the actual invoice cost, without any mark-ups. These third party invoices shall be included in the contractor's billing invoice for payment. The cost of any incidental drayage between the local supplier and the job site will not be considered for payment.

B. PAYMENT: Payment will be made only when directed by the Director of the Department of Sewerage to make repairs not specifically covered by items contained elsewhere in this proposal. Payment shall include furnishing all labor, equipment, and materials needed to accomplish the directed emergency work. Payment will be made in accordance with the hourly or daily bid rate for labor and equipment items 148 thru 174, in addition, to the standard bid items 1-147 and 176-177. The additional bid items 148-174 are to be quoted for unforeseen emergencies. Equipment rated for bid for unforeseen emergency work cannot exceed the AED green book rates. The unit bid price per day for "Small Tools", item no. 157, shall include the cost to supply, maintain, operate, and any other item associated with the use of any and all miscellaneous hand tools or other tools not covered by other bid items.

2.35 <u>INSTALLATION OF HANDICAP ACCESS RAMP AT CURB/STREET TRANSITION:</u>

A. MEASUREMENT:

The measurement for the installation of handicap access ramps will be by the square yard of surface area formed and/or tooled, within the limits of ramp and curb transitions.

B. PAYMENT:

The actual surface area of sidewalk/curb formed and tooled to meet all applicable regulatory requirements will be paid at the unit bid price. The bid price shall include all labor, any materials, or special tools/forms to complete the work, in accordance with all regulatory requirements. NOTE: This bid item is intended to compensate for the extra labor involved in forming access ramps. This item does not include the cost for concrete replacement (for sidewalk and curb), those items will be paid for under the respective applicable bid items.

2.36 ADDITIONAL GRANULAR MATERIAL:

A. MEASUREMENT:

The measurement for granular material will be by the cubic yard.

B. PAYMENT:

Where specific site conditions dictate and at the discretion and direction of PWIRS and/or Director of Sewerage, the use of additional granular material (pumped river sand), above that specifically required by the Contract, will be supplied and placed as directed. The actual quantity of granular material supplied and placed, when directed by PWIRS and/or Director of Sewerage will be paid for at the unit bid price. This price and payment will constitute full compensation for furnishing all labor, equipment, and materials to perform the work.

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CLEANING

6.01 GENERAL:

The intent of sewer line cleaning is to remove foreign materials from the lines and restore the sewer to a minimum of 95% of the original carrying capacity, or as required for proper seating of internal pipe joint sealing packers. Since the success of the other phases of work depends a great deal on the cleanliness of the lines, the importance of this phase of the operation is emphasized. It is recognized that there are some conditions, such as broken pipe and major blockages that prevent cleaning from being accomplished, or where additional damage would result if cleaning were attempted or continued. Should such conditions be encountered, the Contractor will not be required to clean those specific manhole sections. A daily log shall be maintained to record the location of the manholes, catch basins, wet wells, sanitary, and drain lines cleaned; lengths of the lines cleaned; method of cleaning; line sizes; and volume and type of debris removed.

6.02 **EQUIPMENT**:

The equipment expected to be used for the cleaning work on this project is a high velocity combination sewer cleaner and vacuum truck, supplying water at a minimum of 80 gpm at a minimum of 2000 psi.

6.03 EXECUTION:

If the cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be re-setup on the other manhole and cleaning attempted again. If successful cleaning cannot then be performed, it will be assumed that a major blockage exists and the cleaning efforts shall be abandoned until an excavation and "point repair" can be made by Parish supplied forces. The cleaning operation can then be resumed. The Contractor shall then be paid for the initial cleaning attempt. After removal of the blockage the Contractor will again clean the line section. The Contractor shall then be paid for the second cleaning at the same rate as the initial cleaning. All sludge, dirt, sand, grease, rocks, and other solid or semi-solid materials resulting from the cleaning operation shall be removed from the downstream manhole of the section being cleaned. Passing material from manhole section will not be permitted, as this could cause line stoppages, accumulations of sand in wet wells or damage pumping equipment. The Contractor shall not be responsible for removing mortar or other material, which is securely attached to the pipe walls or joints. Cleaning will be determined to be complete when video inspection of the pipe indicates that all loose debris has been removed so that the entire pipe wall is visible.

6.04 <u>DISPOSAL OF MATERIALS</u>:

Materials shall be disposed of from the work site not less often than once at the end of each work-day. The Contractor will provide satisfactory evidence daily to the Parish of the amount of material removed from the pipes. These quantities will be subjected to certification, as deemed necessary by PWIRS and/or Director of the Department of Sewerage. The Contractor may dispose of materials removed during the cleaning process in the Bridge City Wastewater Treatment Plant drying beds. He must first contact either the Superintendent, or the operator on duty, before disposal. The telephone at the Bridge City Wastewater Treatment Plant is (504) 731-4490. Any damage caused by improper disposal or use of the drying beds, including roadways damaged by disposal activities, shall be repaired by the Contractor at his own expense. The Contractor shall adhere to all local, state, and federal guidelines in disposal of this material.

6.05 COMBINATION VACUUM/CLEANING TRUCK

The Contractor will be required to clean sewer system wet wells and manholes in conjunction with sewer pipeline cleaning. Removal of all loose debris from wet wells and manholes will be required when cleaned.

ROOT REMOVAL

7.01 GENERAL:

Roots shall be removed in the sections designated by PWIRS and/or Director of the Department of Sewerage, where root intrusion is a problem. Special precautions should be exercised to assure removal of visible roots from the joint area, which could hinder normal flow or installation of CIPP. The use of mechanical devices such as kites, balls, rodding machines, expanding root cutters, porcupines, and hydraulic procedures such as high-pressure jet cleaners shall be used, as required. This work will be documented with digital format, before and after removal of the roots, as directed by PWIRS and/or Director of the Department of Sewerage.

VIDEO INSPECTION

8.01 GENERAL:

When cleaning is completed, the Contractor will proceed with the video inspection.

It is the intent of Jefferson Parish to determine applicable cost effective rehabilitation and repair techniques, based on video inspection performed on this contract.

8.02 EXECUTION:

Pipe inspection shall be accomplished by one of the following methods:

A. Video 6 inch sanitary service laterals:

 A self-leveling camera will be used for lateral inspection. The camera must be an auto-iris type with remote controlled manual override. The camera light head includes a high-intensity side viewing lighting system to allow illumination of internal sections of lateral sewer connections.

Mainline/Launching – a mainline sewer television camera is used to position the self-leveling mini camera lateral launcher. The lateral sewer camera is used to inspect each lateral from the mainline to the cleanout, property line, or termination point.

Push Camera/Cleanout or Access Point- a self-leveling mini camera on a flexible push rod will be used for inspection. The lateral sewer camera is used to inspect each lateral from the cleanout or access point to the mainline connection.

Both lateral inspections will be performed with the same minimum criteria for mainline inspections. Cleaning, conditions, classification, and recording will also apply.

- 2. Reports and electronic uploads will be provided per Technical Specification Section 24 Field Inspection Reports and Section 25 Data Management Systems and Reporting Requirements.
- B. Television Inspection of 6 inch thru 60 inch Mainline Pipe:
 - 1. The contractor shall use a pan and tilt articulating lens, closed circuit color video system to remotely inspect the pipe. The television camera used for the inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture of the entire periphery of the pipe. The camera shall be operative in 100% humidity conditions. The camera, television monitor, the video recorder, and other components of the video system shall be capable of producing the picture quality required to properly evaluate the condition of the pipe being inspected.
 - 2. Depth of flow shall not exceed that shown below for the respective pipe sizes as measured in the manhole.

Maximum Depth of Flow for Television Inspection:

6 inch – 10 inch pipe 20% of pipe diameter 12 inch – 24 inch pipe 25% of pipe diameter Greater Than 24 inch pipe 30% of pipe diameter

The Contractor will be required to dewater pipe dips as necessary to allow the required visibility. This dewatering will be considered incidental to the video inspection. Picture quality and definition shall be to the satisfaction of PWIRS and/or Director of the Department of Sewerage.

 Plugging: A sewer line plug shall be installed upstream of the section being worked. The plug shall permit a portion of the sewerage to be released. After the work has been completed, sewage flow should be restored to normal.

Sewer plugs shall be installed in the influent pipe of a manhole. The plug shall be equipped with an air hose to permit deflation from above ground. A strong rope should be attached to enable the plug to be quickly pulled out of the manhole. Contractor shall be responsible for preventing a plug from being pushed into the outgoing pipe when stored sewage is released.

The camera shall be moved through the line in either direction at a moderate rate, stopping when necessary to permit proper documentation of the pipe's condition. In no case will the television camera be moved at a speed greater than 30 feet per minute. Manual winches, power winches, TV cable, and powered rewinds, or other devices that do not obstruct the camera view or interfere with proper documentation of the pipe conditions shall be used to move the camera through the line. If during the inspection operation the television camera will not pass through the entire section due to an obstruction, such as a dropped joint, crushed pipe, etc., the Contractor shall set up his equipment so that the inspection can be performed from the opposite end. If, again, the camera fails to pass through the entire section because of an obstruction, the inspection shall be considered complete at this time. When manually operated winches are used to pull the television camera through the line, radios or other suitable means of communication shall be set up between the two ends of the section being inspected to insure good communication between members of the crew

- 5. The importance of accurate distance measurements is emphasized. Measurement for location of defects and service connections shall be done with a metering device located in the video inspection van. The footage reading of the counter must be displayed at all times on the monitor and on videotape. Marking on the cable, or the like, which would require interpolation for manhole depth, will not be allowed. Accuracy of the distance meter shall be checked by use of a tape and the accuracy shall be within 1%.
- 6. The location of all significant pipe defects shall be recorded on the inspection log including, but not limited to, cracked and missing pipe, degree of pipe deterioration, open or shifted joints, leaking joints, leak estimates, crushed pipe, and obstruction. The log shall also show pipe type, size depth, manhole locations, and location of all service connections. In addition, as part of the mainline video inspection, the Contractor must determine and record the street number addresses of all observations.
- 7. The Contractor shall be responsible for the accuracy of addresses and assessed point repair footages provided under this contract.

- **8.** After issuance of a video inspection work order, but prior to initiation of field inspection work, the Contractor will field survey the work order area to determine manhole addresses and address qualifiers. Upon completion of this manhole survey, the Contractor will submit a complete mainline inventory of all manholes in the work order scope to PWIRS and/or Director of the Department of Sewerage for approval.
- 9. A digital MPEG recording, using software compatible to Peninsular Technology's software, should be made, by the Contractor, of all pipe sections video inspected. The recording will include a complete "Color" video of the entire inspection. The video inspection shall have the capability of permanently displaying, on the video tape, information concerning the pipe inspected, including project number, data, street name, manhole designations, size of pipe, and the footage counter. On at least a bi-weekly basis, the contractor will electronically submit a computer media containing all field investigation data collected during the week to Jefferson Parish. The Contractor will also electronically submit on a bi-weekly basis, television inspection data as provided in Sections 25 & 26, which shall be completed during each video inspection. For the duration, the contractor will maintain a local library containing a copy of all video recording generated on this Contract. All the data gathered in the field investigation shall be uploaded into a system compatible with the Lucity Observation Code as minimum of the data fields identified in the attached forms. All codes shall follow Jefferson Parish Standards. The Jefferson Parish Standards are located on the Jefferson Parish website at www.jeffparish.net, under the link for the Department of Engineering.
- **10.** Video inspection activities may be coordinated with dye-flooding when directed by PWIRS and/or Director of the Department of Sewerage.
- 11. Since Jefferson Parish is in a high rainfall area, all of the original sanitary and drain pipe capacities are needed. No reconstruction method will be considered that does not provide at least 100% flow capacity of the original sanitary and storm sewer pipes.
- 12. The Contractor shall be paid for the actual linear feet of pipe inspected at the unit bid prices for the various sizes of sanitary or storm sewer pipes. The Contractor shall be paid additional compensation for television inspection when a reverse setup is required because of an obstruction in the pipe by which the camera cannot pass. A "reverse setup" occurs when a line section must be television inspected from both directions, because an obstruction halted camera progress from the initial setup. The Contractor will be paid for the initial inspection attempt as though it was satisfactorily completed. Whenever a re-

inspection is performed after removal of the obstruction, the Contractor shall be paid again at the same rate as for the first video inspection.

- **13.** All of the data gathered in the field investigation shall be input into a system compatible to the Lucity sewer system management program by the Contractor to generate reports detailing the leaks identified, and any further evaluation or repair work to be done.
- **14.** All digital videos gathered in the television inspection shall be digitized using software compatible with Peninsular Technology software.

PIPE REHABILITATION BY INSTALLATION OF CURED-IN-PLACE PIPE

9.01 GENERAL

It is the intent of this specification to provide for the reconstruction of existing sanitary and storm sewer pipes by forming a new pipe within an existing structurally deteriorated pipe, which has generally maintained its original shape. The cured-in-place- pipe (CIPP) shall provide flow capacity equal to or greater than "100% of the original pipe's flow capacity when new". The installation of the CIPP shall be accomplished by the use of either the Insituform Process, LMK, or National Liner Process. The process is defined as the reconstruction of sanitary and storm sewer pipe by installation of a thermosetting, resin impregnated, flexible felt fiber tube (coated on one side with polyethylene) into the existing sanitary and storm sewer pipe utilizing a water column. Curing is accomplished by circulating hot water (or other approved fluid) throughout the length of the tube to cure the thermosetting resin into a hard impermeable pipe. The pipe shall extend the full length of the original pipe and shall provide a structurally sound, jointless, closed-fitting, cured-in-place-pipe.

Rehabilitation of pipelines by pulled-in-place installation of a cured-in-place thermosetting resin pipe shall be used only with approval of the Director of Sewerage, or when noted on the work order issued by Jefferson Parish.

Any process, including those named above, or submitted as an approved equal, which have not been installed previously in Jefferson Parish, shall be required to meet the requirements in the General Conditions of these specifications to prove the acceptability of the product.

9.02 REFERENCED SPECIFICATIONS:

This specification references ASTM F 1216 (Rehabilitation of pipelines by the inversion and curing of a resin-impregnated tube) and ASTM F1743 (Rehabilitation of pipelines by pulled-in-place installation of a cured-in-place thermosetting resin pipe). ASTM D790, (Test Methods for flexural properties of non-reinforced plastics), which are made a part hereof by such reference, and shall be the latest edition and revision thereof. In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

9.03 GENERAL CORROSION REQUIREMENTS:

The CIPP shall be fabricated from materials which, when cured, will be chemically resistant to withstand internal exposure to permitted storm-water and sanitary sewerage.

9.04 MATERIALS:

- A. The flexible felt fiber tube shall be fabricated to a size that, when installed, will neatly fit the internal circumference of the conduit specified by the Department of Sewerage. An allowance shall be made for some circumferential stretching during inversion. Minimum tube thickness shall be as indicated on the bid form. Additional thickness will be used if required by site conditions.
- B. The minimum length shall be that deemed necessary by the Contractor to effectively span the distance from the inlet to the outlet of the respective manholes or other termination points, unless otherwise specified. The Contractor shall verify the lengths in the field before impregnation of the tube with resin. Individual insertion runs can be made over one or more manhole sections, as determined in the field by the Contractor.
- C. Unless otherwise specified, the Contractor shall furnish either polyester, or vinyl ester resin, and a compatible catalyst system that provides cured physical strengths as specified herein. Epoxy vinyl ester resins shall be Derakene 411 series, or approved equal. Polyester resins shall be manufactured by Alpha Owens Corning, or approved equal.

- D. The materials used shall result in an installed CIPP flow capacity equal to, or greater than, 100% of the original pipe's flow capacity when new.
- E. Physical Strength: The CIPP shall conform to the minimum structural standards listed below, or to the then current standards approved by Insituform Technologies or National liner.

Physical

Test Method

Minimum

<u>Values</u>

Characteristic

Flexural Stress

#101 Modified ASTM D-790 4,500 psi

Flexural Modules

#101 Modified ASTM D-790

250,000 psi

Of Elasticity

9.05 PRE-INSTALLATION PROCEDURES:

The following installation procedures shall be adhered to, unless otherwise approved by PWIRS and/or Director of the Department of Sewerage.

- A. Safety The Contractor shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving work on an elevated platform and entry into a confined space.
- B. Pre-inversion Cleaning Cleaning and CCTV performed immediately prior to installation. It shall be the responsibility of the Contractor to remove all loose debris located within the sanitary or storm sewer pipe. Cost shall be incidental to work.
- C. Pre-inversion Inspection- Inspection of sanitary or storm sewer pipe shall be performed by experienced personnel trained in locating breaks, obstacles, and connections by closed circuit television inspection. The interior of the pipe shall be carefully inspected to determine the location of any condition which may prevent proper installation of the CIPP, and it shall be noted so that these conditions can be corrected. A videotape and suitable log shall be kept for later reference by the Department of Sewerage and/or Contractor. Cost shall be incidental to work.

- D. Line Obstructions If inspection reveals an obstruction that cannot be removed by conventional pipe cleaning equipment, such as attached mortar, dropped joints, protruding taps, or collapsed pipe, that will prevent completion of the inversion process, then a point repair excavation shall be made by the Department of Sewerage, or the Department of Sewerage's designated Contractor, or shall be authorized under this contract to uncover and remove or repair the obstruction.
- E. Protruding Tap Removal A robotic machine capable of grinding off clay and concrete lateral protrusions and reinstatement cutting will be used. The machine will work inside the parent and relined pipe without damaging parent or relined pipe walls.

Protruding laterals will be ground back to a ¼ inch protrusion or less. Grinding will be done using a slow speed (1,000 to 1,500 rpm) diamond chip covered ball grinder of nominal 1.50 inch to 2.0 inch diameter. Segmented, notched, or chipping type cutters, which crack and chip the lateral pipe, resulting in broken or cracked laterals will not be accepted.

F. By-passing – When required for acceptable completion of an inversion process task and/or to avoid damages due to sewer spills or overflows, the Contractor shall provide for sanitary or storm water flow maintenance around the section or sections of pipe designated for the inversion process. The bypass shall typically be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or adjacent system. The pump and by-pass of sanitary sewerage into the storm-water system will not be allowed.

The Contractor will notify all parties whose service laterals will be out of service and to advise against water usage until the mainline is back in service. Notification will be at least 24 hours prior to CIPP installation, and no more that 72 hours prior to lining. Notification will be provided by a "door hanger" approved by the Director of the Department of Sewerage.

9.06 INSTALLATION PROCEDURES:

A. Wet-Out – The Contractor shall designate a location where the tube will be impregnated ("wet out") with resin, using distribution rollers and vacuum to thoroughly saturate the felt fiber tube prior to installation. The Contractor shall allow PWIRS and/or Director of the Department of Sewerage to inspect the materials and wet out procedure. A catalyst system compatible with the resin and tube shall be used.

- B. Insertion The wet out tube shall be inserted through an existing manhole or other approved access and the application of a fluid column sufficient to fully extend it to the next designated manhole or termination point. The fluid column will be adjusted to be of sufficient height to cause the impregnated tube to hold tight against the existing pipe wall, produce dimples at side connections, and flared ends at the manholes.
- C. Curing After the insertion is completed, the Contractor shall supply a suitable heat source and fluid re-circulation system capable of delivering hot fluid uniformly throughout the section to effect a consistent cure of the resin. The curing temperature shall be that recommended by the resin/catalyst system manufacturer.

The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing fluid supply. Another such gauge shall be placed between the impregnated tube and the invert of the original pipe at the manholes(s) or other termination points to determine the temperatures during the resin curing process. Initial cure shall be considered completed when the exposed portions of the CIPP appear to be hard and the remote temperature sensing device indicates the cure period to be of adequate duration, as recommended by the resin/catalyst system manufacturer, and modified for the inversion process.

- D. Cool-down The Contractor shall cool the hardened CIPP to a temperature below 100 degrees Fahrenheit before relieving the fluid column. Cool fluid may be added to the fluid column while draining hot fluid from a small hole at the opposite end of the CIPP, so that a constant fluid column height is maintained until cool-down is completed. Care shall be taken in the release of the fluid column so that a vacuum will not be developed that could damage the newly installed CIPP.
- E. Warranty The finished CIPP shall be continuous over the entire length of an inversion run and be as free as commercially practicable from visual defects, such as foreign inclusions, dry spots, pinholes, and delamination. It shall also meet the water-tightness test requirement specified below. During the warranty period any defects, which will affect the integrity or strength of the CIPP shall be repaired at the Contractor's expense in a manner mutually agreed to by the Department of Sewerage and the Contractor. The warranty period is for five years from the date of completion, after acceptance by Department of Sewerage.

9.07 <u>SEALING AT MANHOLES:</u>

If the CIPP fails to make a tight seal at a manhole or other termination point, the Contractor shall apply a seal at that point. The seal shall be of a material compatible with the CIPP material.

9.08 RESTORATION OF SANITARY SEWER SERVICE CONNECTIONS:

After the CIPP has been cured in place, the Contractor shall re-open the existing active sanitary or storm sewer connections as designated by PWIRS and/or Director of the Department of Sewerage. This shall be done usually without excavation, and in the case of non-man-entry pipe, (i.e. pipe less than 24" in diameter) from the interior of the pipeline, by means of a television camera and a cutting device that re-establishes the sanitary or storm sewer connections to not less than 90% of their original size (when new) and shall be fully functional. Restored openings should be neatly and smoothly cut and without rough edges. Care must be exercised not to damage the CIPP or the existing main or lateral pipes. Cutting devices that use high pressure water shall not be used since they may cause damage to the lateral. All liner materials shall be removed from the internal wall of lateral connection. When fiberglass or other reinforcing fibers are used, that may cause wicking at lateral openings, the lateral opening edges must be sealed with a resin mixture compatible with the tube resin. Connections should not be over cut, as this could damage the pipe, break the CIPP seal, and/or interfere with future lining of the lateral.

Lateral reinstatement shall be done using either a wire steel brush cutter or a coarse carbide crystal surface type cutter. This method of cutting shall not damage the lateral pipe material and shall result in a smoothed even surface, which is flush with and follows the lateral pipe internal wall contour regardless of penetration geometry. Drill or router bits shall not be allowed. Holes cut outside the lateral opening or oversized cutting (more than 105%) must be corrected to PWIRS and/or Department of Sewerage satisfaction.

If under normal circumstances the CIPP interior method of tap cutting does not prove satisfactory, an external tie-in of the house connection will be required. This external tie-in shall be made by the Contractor at his expense.

9.09 TESTING:

The water-tightness of the CIPP shall be gauged by monitoring the water level in the inversion tube while curing. The water testing must be done directly on the finished product and not on an intermediary hose, which is not part of the final product.

For each installation the Contractor shall perform tests on a sample of the cured installed liner. Tests conducted shall include the following:

- Thickness of sample
- Flexural strength

c. Flexural modules of elasticity

The method for taking the sample shall be as follows:

Place a short section of pipe in the manhole aligned with and the same size as the existing sewer. Run the impregnated tube through the pipe and cure the CIPP under restrained conditions. Label samples with the project number, date of installation, location, manhole number, and specified thickness.

These tests will be conducted in accordance with Modified A.S.T.M. D-790. The testing shall be accomplished by an independent, certified testing laboratory, provided and paid for by Jefferson Parish.

9.10 **CLEAN-UP**:

Upon acceptance of the installation work and testing, the Contractor shall reinstate the project area affected by his operations.

9.11 POST VIDEOS:

At the completion of the rehabilitation of a pipe-line the Contractor will electronically provide PWIRS and/or the Director of the Department of Sewerage with video inspections of the completed line segment. This inspection will be used to determine if the line has been restored in a satisfactory fashion.

This inspection shall be performed, one section at a time, by closed circuit color television, using a radial view camera. The flow entering the section being inspected shall be plugged as required and previously described. The television camera used for this inspection shall be one that is specifically designed and constructed for such conditions. Picture quality and definition shall be to the complete satisfaction of PWIRS and/or Director of the Department of Sewerage. If necessary, equipment shall be removed and no payment made until satisfactory inspection is made. The camera shall be pulled through the pipe slowly, in order to fully inspect for any defects. Location records shall be kept by the Contractor, which will clearly show the exact location, in relation to adjacent manholes, of all house connections. Electronically computer-generated copies of this log and data shall be supplied to PWIRS and/or Director of the Department of Sewerage.

9.12 SERVICE RECONSTRUCTION/REPLACEMENT PRIOR TO CIPP:

For deteriorated or damaged connections, or, ones which are protruding and cannot be cut internally, the Contractor will excavate and make the repair prior to installation of the CIPP.

After the liner has been put into place, allowed to normalize to ambient temperature, and recover from any imposed stretch, each existing service connection shall be reconnected to the new liner. A portion of the existing sanitary sewer main, or "Carrier pipe", around each service connection shall be removed to expose the liner pipe and to provide sufficient working space for installing a pre-fabricated polyethylene saddle, or an approved alternate. The polyethylene saddle must be a one-piece saddle equipped with a neoprene gasket, so that a complete seal is accomplished when the strap-on saddle is tightened with two (2) stainless steel bands; one on each side. The stub-out attached to the saddle must protrude into the liner a distance equal to the wall thickness of the liner in place. The new 4 inch, 6 inch, or 8 inch stub-out, or lateral, shall be connected to the existing service line with a flexible "Fernco" PVC coupling, with stainless sleeves, or an approved equal. A service reconnection shall consist of the removal and replacement of any cracked, offset, or leaking existing service, up to a distance of eight (8) feet from the center of the new liners, measured horizontally.

The new flexible coupling shall be secured to the existing service lateral, and new stub and/or stack, with stainless steel bands.

9.13 <u>PATENTS:</u>

The Contractor shall warrant that the methods, materials, and equipment used herein, where covered by license, are furnished in accordance with such license, and the prices included in this proposal include applicable royalties and fees in accordance with such license. The Contractor shall warrant and save harmless Jefferson Parish against all claims for patent infringement and any loss thereof.

SERVICE LINE OR MAINLINE POINT REPAIR

10.01 SCOPE OF WORK:

The work covered by this item consists of furnishing all labor, material, equipment, supervision, etc. necessary to point repair the portion of a service line located within the utility easement, street right-of-way, or mainline sewer. The point repair shall only be addressed if it is located in an easement or right-of-way. No repair to service lines shall be made on private property. The location of the repair shall be determined by smoke testing the manhole section in which the repair is located. PWIRS and/or the Director of Sewerage shall direct the Contractor to make the line repair. It shall be the Contractor's responsibility to accurately field locate the exact point of repair. Service line point repairs are needed to repair a variety of defects, including cleanout repair, removing from service disconnected services, repairing storm sewer cross connections, disconnecting surface drains, and repairing faulty service taps. Main line repairs will only be performed when necessary to facilitate the installation of the CIPP liner, as directed by the Department of Sewerage and/or PWIRS. Point repairs may be performed by others under a separate contract.

10.02 MATERIALS:

Materials for line repair shall be of the same types as specified in the "Replacement Pipe and Fittings" section and "Sewer Clean-outs" section.

10.03 METHOD OF POINT REPAIR:

After the location of the point repair is determined, the Contractor shall excavate and remove the damaged pipe and replace with new pipe. The minimum length of pipe replaced shall be three (3) feet.

The Contractor shall excavate, shape the bottom of the trench, and place the required pipe bedding so that the grade of the replaced pipe matches the existing line grade.

The pipe replacement material shall be gasketed joint, gravity PVC sewer pipe (ASTM D-3034, SDR 26), and have a minimum cell classification of 12454 A or B, as defined in ASTM C-1784. Installation shall be in strict compliance with the manufacturer's

recommendations. The method of joining the ends of the replaced pipe with the existing pipe shall be water-tight. The existing and new pipe shall be joined with a "Fernco" with stainless sleeves adapter, or approved equal. It shall be encased with a reinforced concrete collar.

OR

All pipe couplings shall attach to the existing and replacement pipes by means of stainless steel bands with screw and housing to assure a positive seal around the pipe. All flexible couplings shall be installed with a stainless steel shear ring. Should stainless shear rings not be furnished with flexible couplings, furnished couplings must be approved by Department of Sewerage prior to installation.

NOTE: Numerous service line point repairs along with lateral line point repairs and obstruction removals are located in areas, which in many instances, will require the removal of existing landscaping, structures, etc. Items removed or disturbed shall be replaced to a condition equal to, or better than, the original condition. All necessary labor, equipment, materials, and other items necessary to complete this work, in accordance with the plans and specifications, are incidental.

10.04 GENERAL DESCRIPTION OF WORK ITEMS:

- A. REPAIR/ADJUST CLEANOUT: Cement, plaster, or replace the broken cleanout.
- **B.** INSTALLATION OF SEWER CLEANOUT TYPE 1: As detailed on the drawings.
- C. REPLACE SECTION OF SERVICE LINE: Replace a specified length of service line.
- D. RESTORE 8 INCH 10 INCH MAIN BY POINT REPAIR: Replace 8 inch to 10 inch main line at various depths up to eight (8) feet in length.
- E. RESTORE 8 INCH 10 INCH MAIN BEYOND POINT REPAIR: Replace 8 inch to 10 inch main line at various depths beyond eight (8) feet in length.
- F. RESTORE 6 INCH 18 INCH SEWER FORCE MAIN BY POINT REPAIRS: Remove and replace a section of 6 INCH to 18 INCH force main less than eight (8) feet in length (to be used with RCPP lining only).

10.07 REMOVAL OF DEBRIS:

Excess excavated material and debris are to be removed from the work site daily. Cost of hauling excess excavation and debris is to be included in the price bid for "Service Line Repair".

10.08 **TESTING**:

Upon completion of the point repair on a designated line segment, the Contractor shall perform a smoke test as previously described, to check the integrity of the repair. This smoke test shall be done upon completion of all repairs in a manhole section, prior to backfilling. PWIRS, Director of Sewerage and Contractor shall check each repair and if any smoke is detected at the repair location, the Contractor shall redo his repair and repeat the smoke test at no additional cost to the Department of Sewerage. All smoke testing and re-testing shall be considered incidental to the point repair.

REPLACEMENT PIPE, FITTINGS, AND MISCELLANEOUS ITEMS

11.01 SCOPE OF WORK:

The Contractor shall furnish all labor, materials, equipment, and incidentals to complete a "Point Repair", using materials described herein, and being compatible to the removed materials.

11.02 SUBMITTALS:

- A. The Contractor shall submit a list of materials to be furnished and the names of his suppliers to PWIRS and Department of Sewerage.
- B. If materials indicated in these specifications are not commonly stocked, the Contractor shall state the approximate time required to obtain these materials.
- C. The Contractor shall submit and shall comply with pipe manufacturer's recommendations for handling, storing, and installing pipe and fittings.
- **D.** The Contractor shall submit pipe manufacturer's certification of compliance with these specifications.

11.03 MATERIALS:

11.03.01 Poly-vinyl Chloride (PVC) Pipe used for Gravity Sewer:

- A. Poly-vinyl Chloride (PVC) gravity sewer pipe and fittings, 4 inch through 16 inch diameter, shall conform to ASTM D-3034, "Type PSM Poly-vinyl Chloride (PVC) Sewer Pipe and Fittings", SDR—26.
- B. Poly-vinyl Chloride (PVC) gravity sewer pipe and fittings, 18 inch through 27 inch diameter, shall conform to ASTM F-679, "Poly-vinyl Chloride (PVC) Large-Diameter Plastic Pipe and Fitting", T-2 wall thickness

- C. All gravity sewer lines with more than ten (10) feet of cover and any pipe under roadways with less than four (4) feet of cover shall conform to the specifications "Poly-vinyl Chloride (PVC) Pipe C-900".
- D. The supplier shall be responsible for the performance of all inspection and testing requirements specified in ASTM D-3034 or ASTM F-679, as applicable. Complete records of inspections, examinations, and tests shall be kept and submitted to PWIRS. PWIRS and/or Director of Sewerage reserves the right to perform any of the inspections set forth in the specifications, where such inspections are deemed necessary to assure that materials and services conform to the prescribed requirements.
- E. The pipe shall be joined with an integral bell and spigot type rubber gasket joint. Each integral bell joint shall consist of a formed bell with a rubber gasket. Gaskets shall conform to ASTM F-477. Joints shall permit contraction, expansion, and settlement; and yet maintain a water-tight connection.
- F. Pipe shall be furnished in standard laying lengths not exceeding twenty (20) feet.
- **G.** All fittings and accessories shall be furnished by the pipe supplier, and shall have bell and/or spigot configurations compatible with the pipe.

11.03.02 Ductile Iron Pipe and Fittings:

- A. All ductile iron pipe shall be ductile iron, manufactured in accordance with the requirements of the latest revision of AWWA C 150 and C 151, and shall conform to ANSI specifications A21.51, and thickness design A21.50-76. Pipe supplied shall be Class 51 for pipe eight inches (8") and smaller, Class 52 for pipe ten inches (10") and larger, and shall meet all requirements for push-on rubber gasket joints, in accordance with AWWA C111.
- B. Unrestrained joint pipe shall be supplied in lengths not in excess of twenty one (21) feet. Pipe shall be either the rubber-ring type, push-on joint, or standard mechanical joint pipe, as manufactured by the American Cast Iron Pipe Company, U.S., Pipe and Foundry Company, Clow Corporation, or Department of Sewerage approved equal.
- **C.** Fittings shall meet the requirements of ANSI/AWWA C110. Rubber gaskets shall conform to ANSI A21.11 mechanical and push-on type joints.

- D. All ductile iron pipe and fittings shall have a Protecto 401 lining on the inside, and a coal tar enamel coating on the outside. The coal tar enamel outside coating shall be in accordance with ANSI A21.4.
- E. Restrained joints shall be provided at locations shown on the drawings. Restrained joint pipe and fittings for twelve (12) inches and smaller diameter pipe shall be "Mechanical Joint with Retainer Gland", as manufactured by American Cast Iron Pipe Company; "Lok-Tyton", as manufactured by U.S. Pipe Company; "Super-Lock", as manufactured by Clow Corporation, or Department of Sewerage approved equal.

11.04 <u>IDENTIFICATION:</u>

Each length of pipe and each fitting shall be marked with the name of manufacturer, size, and class. All gaskets shall be marked with the name of manufacturer, size, and proper insertion direction.

11.05 MANHOLE CONNECTIONS:

Pipe stubs for all manhole connections shall not exceed two (2) feet in length. Caps shall be furnished where required.

11.06 LAYING POLY-VINYL CHLORIDE (PVC) PIPE AND FITTINGS:

- A. Poly-vinyl Chloride (PVC) pipe shall be laid in accordance with the instructions of the manufacturer, as shown on the drawings, and as specified herein. As soon as the excavation is completed to normal grade, as indicated on the drawings, the Contractor shall immediately place bedding in the trench. Then the pipe shall be firmly bedded to conform accurately to the line and grade indicated on the drawings. Embedment of pipe shall conform to the details shown on the drawings and ASTM D2321, "Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe". Bell holes shall be excavated so that after installation, only the pipe barrel shall bear upon the trench bottom. Proper selection and placement of bedding and backfill materials are necessary to minimize deflection of the pipe diameter. No blocking under the pipe will be permitted, except as allowed in these specifications.
- B. The Contractor shall use care in handling and installing pipe and fittings. Storage of pipe on the job site shall be done in accordance with the pipe manufacturer's recommendation and with approval of the Director of Sewerage. Under no circumstances shall pipe or fittings be dropped either into the trench or during unloading. The interior of the pipe shall be kept clean of oil, dirt, and foreign matter,

and the machined ends and couplings shall be wiped clean immediately prior to joining.

- C. The Contractor shall use a PVC pipe cutter, where necessary, to cut and machine all PVC pipe in the field. A "full insertion mark" shall be provided on each field-cut pipe end. Field-cut pipe shall be beveled with a beveling tool made especially for plastic pipe. Bevels shall be in accordance with the manufacturer's requirements.
- **D.** Each length of pipe and each fitting shall be marked with the normal size, the SDR designation, the name of the manufacturer or his trademark, and the date of manufacture.
- E. Rubber gaskets shall be marked with manufacturer's identification sizes and proper insertion direction.
- F. The interior of the pipe and the jointing seal shall be free from sand, dirt, and trash before installing in the line. Extreme care must be taken to keep the bells of the pipe free from dirt and rocks, so that joints may be properly assembled without over stressing the bells. The jointing of the pipe shall be done in strict accordance with the pipe manufacturer's instructions, and shall be done entirely in the trench.
- **G.** Each time the work is halted for more than one (1) hour, the ends of the pipe shall be closed to prevent foreign material from entering the pipe.
- H. In all cases where this type of pipe is installed, a metallic tape shall be affixed to the top of the pipe. The tape shall be Type A-1 Alertine Detectable Marking Tape, or approved equal.

11.07 LAYING DUCTILE IRON PIPE AND FITTINGS:

- A. All buried piping shall be installed in accordance with recommendations of the pipe manufacturer, and as specified herein.
- B. Care shall be taken in handling, storage, and installation of pipe and fittings, to prevent damage to the pipe or coating. All pipe and fittings shall be examined before laying, and no piece shall be installed which is found to be defective. All damage to the pipe coating shall be repaired according to the manufacturer's recommendations.

- C. Rubber gaskets shall be marked with manufacturer's identification sizes and proper insertion direction.
- D. The interior of the pipe and the jointing seal shall be free from sand, dirt, and trash before installing in the line. Extreme care must be taken to keep the bells of the pipe free from dirt and rocks, so that joints may be properly assembled, without over stressing the bells. The jointing of the pipe shall be done in strict accordance with the pipe manufacturer's instructions, and shall be done entirely in the trench.
- E. Each time the work on the sewer is halted more than one (1) hour, the ends of the pipe shall be closed to prevent foreign material from entering the pipe.

11.08 MARKER TAPE:

Marker tape is to be installed on all lines. The color is to be yellow with "CAUTION – SEWER LINE BURIED BELOW" written on it. The tape is to be two (2) inches wide, and located between the bedding and the backfill along the centerline of the pipe.

11.09 PIPE COUPLINGS:

Repairs made to similar pipe shall be accomplished with the use of similar repair couplings or spool pieces. Repairs made to dissimilar gravity sewer line pipe (i.e., PVC to clay, transit or other) shall be accomplished with the use of flexible elastomeric P.V.C. pipe couplings or adapters manufactured by Fernco, Indiana Seal, or approved equal. All pipe couplings shall attach to the existing and replacement pipes by means of stainless steel bands with screw and housing, to assure a positive seal around the pipe.

SEWER CLEAN-OUTS AND MANHOLES

12.01 SCOPE OF WORK:

When instructed, the Contractor will be required to install service lateral clean-outs. A sewer clean-out installation shall consist of all pipe, fittings, adapters, castings, and/or cover boxes. Sewer clean-outs shall be Type 1 installation, as shown on the Standard Details obtained from Jefferson Parish Department of Engineering. The Type I to be installed will be indicated on the work order. Materials for manhole rehabilitation are also covered herein.

12.02 MATERIALS:

- A. Approved pipe and fittings, (See "Replacement Pipe and Fittings")
- B. Clean-out Frame & Cover: Vulcan V-8504, or approved equal
- C. Manhole Walls and Cones: Manufactured in accordance with ASTM C478

12.03 EXECUTION:

A. Sewer clean-outs are to be installed as indicated on the Standard Detail sheet. Sewer clean-out piping is to be installed from the depth of the service lateral to the existing grade line, so that the sewer clean-out plug fitting and cover are flush with the grade line.

Sewer clean-out frame and cover are to be installed flush with grade line. The frame is to be encased in a 4-inch thick square concrete footing, extending 3-inches around the clean-out frame.

CURED-IN-PLACE-LATERAL RECONSTRUCTION FROM CLEAN-OUT

13.01 <u>DESCRIPTION:</u>

Work under this item shall provide for the reconstruction of lateral sanitary sewer pipelines with the installation of resin impregnated, flexible felt tubes. The resin impregnated flexible felt tube shall be installed into the existing service using a pull rope, or a push rod. Curing shall be accomplished with hot water, or other methods approved by PWIRS and/or Director of Sewerage. The curing method shall be suitable for the selected resin, such that the resin produces a hard, impermeable pipe wall. The cured-in-place pipe (CIPP) should extend throughout the initially defined and agreed upon length in a jointless, continuous, tight fitting, watertight pipe-within-a-pipe, to effect a seal with the mainline reconstructed pipe. Approved products are those provided by LMK Enterprises, Insituform Technologies or National Liner. Any process, including those named above, or submitted as an approved equal, which has not been previously installed in the sewer collection system under the jurisdiction of the Jefferson Parish Department of Sewerage, shall be required to meet the requirements of the General Conditions Section of these specifications to prove acceptability of the product.

Materials shall be governed by the requirements of Technical Specification Section 9 – "Pipe Rehabilitation by Installation of Cured-in-Place Pipe".

13.02 REFERENCE SPECIFICATIONS:

This specification references ASTM test methods, which are made a part thereof by such reference and shall be the latest edition and revision thereof.

13.03 GENERAL CORROSION REQUIREMENTS:

The finished cured-in-place product shall be fabricated from materials which, when cured, will be chemically resistant to withstand exposure to domestic sewage.

All constituent materials will be suitable for service in the environment intended. The final product will not deteriorate, corrode, or lose structural strength that will reduce the projected product life.

13.04 CIPP MATERIALS:

A flexible felt tube shall be fabricated to a size that when installed will neatly fit the internal circumference of the conduit specified by the Director of Sewerage. Allowance shall be made for circumferential stretching during insertion.

The minimum length shall be that deemed necessary by the Installer, as approved by the Director of Sewerage, to effectively span the distance from the lateral connection at the main to the desired termination location in the service lateral pipe. The Installer shall verify the lengths in the field before impregnation.

Unless otherwise specified, the Installer shall furnish a specially designed, unsaturated, polyester resin, and catalyst system, compatible with the CIPP process that provides cured physical strengths specified herein.

13.05 PHYSICAL STRENGTH:

The structural performance of the finished pipe must be adequate to accommodate all anticipated loads throughout its design life. No cured-in-place pipe reconstruction technology will be allowed that requires bonding to the existing pipe for any part of its structural strength. Only resin vacuum impregnation will be allowed. If reinforcing materials (fiberglass, etc.) are used, the reinforcing materials must be fully encapsulated within the resin to assure that the reinforcement is not exposed, either to the inside of the pipe, or at the interface of the CIPP and the existing pipe.

Design methods are to be derived from traditionally accepted pipe formulae for various loading parameters and modes of failure. All equations will be modified to include ovality as a design parameter. The design method shall be submitted to the Director of Sewerage for approval.

The cured CIPP shall conform to the minimum structural standards listed below:

CURED CIPP ASTM Standards Results

Flexural stress ASTM D 790 4,500 psi

Flexural Module of Elasticity

ASTM D 790

250,000 psi

13.06 <u>INSTALLATION PREPARATION:</u>

The following installation procedures shall be adhered to, unless otherwise approved by PWIRS and Department of Sewerage.

Safety – The Installer shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving entering confined spaces.

Cleaning of Sewer Line – It shall be the responsibility of the Installer to remove all internal debris out of the sewer line (refer to standard sewer cleaning specification, contained in Technical Specification Section 6 – Cleaning).

Inspection of Pipelines – Inspection of pipelines shall be performed by experienced personnel, trained in locating breaks and obstacles by closed circuit television. The interior of the pipeline shall be carefully inspected to determine the location of any conditions, which may prevent proper installation of CIPP into the pipelines, and it shall be noted so that these conditions can be corrected. A videotape and suitable log shall be kept for later reference by PWIRS and Department of Sewerage.

Bypassing Sewage – The Installer, when required, shall provide for the flow of sewage around the section or sections of mainline pipe where the service lateral designated for CIPP is located. The bypass shall be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow.

It is required that the service lateral be inactive during the time of installation. This is normally accomplished by turning off the homeowner's services, or requesting that the homeowner relinquish using his services during the required period of installation.

Line Obstruction — It shall be the responsibility of the Installer to clear the line of obstructions such as solids, dropped joints, roots, or collapsed pipe that will prevent the insertion of the CIPP material. If inspection reveals an obstruction that cannot be removed by conventional sewer cleaning equipment, then the Installer shall make a point repair excavation to uncover and remove, or repair the obstruction. Such excavation shall be approved in writing by PWIRS and/or Director of Sewerage, prior to the commencement of the work, and shall be considered as a separate pay item.

13.07 INSTALLATION OF CIPP:

The Installer shall designate a location where the felt tube will be vacuum impregnated prior to installation. The Installer shall allow PWIRS and/or Director of Sewerage to inspect the materials and "Wet-out" Procedure. A catalyst system compatible with the resin and felt tube shall be used.

The wet-out tube shall be attached to a pull cable strung from the lateral and main to the downstream manhole. The tube will be pulled through the lateral so that the end ring projects into the main. The tube will be firmly seated against the mainline wall by pulling back on the end of the tube. The tube shall be inflated with water or other appropriate medium to fully expand the tube and press it firmly against the walls of the existing lateral.

Curing – After inversion is completed, the Installer shall supply suitable heat source and water recirculation equipment. The equipment shall be capable of delivering hot water or other approved heat source throughout the section by means of a pre-strung hose to uniformly raise the water temperature above the temperature required to affect a cure of the resin. This temperature shall be determined by the resin/catalyst system employed.

The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply. Water temperature in the line during the cure period shall be recommended by the resin manufacturer.

Initial cure shall be deemed to be completed, when inspection of the exposed portions of the CIPP appears to be hard and sound, and the temperature gauge indicates that the temperature is of a magnitude to realize an exotherm. The cure period shall be of a duration recommended by the resin manufacturer, as modified for the CIPP process, during which time the recirculation of the water and cycling of the heat exchanger to maintain the temperature continues.

Cool-down – the Installer shall cool the hardened CIPP to a temperature below 100 degrees Fahrenheit before relieving the pressure in the pressure apparatus. Cool-down may be accomplished by the introduction of cool air into the pressure apparatus to replace water being forced out of the pressure apparatus. Care shall be taken to maintain proper pressure throughout the cure and cool-down period.

Finish – The finished CIPP shall be continuous over the entire length of an inversion run, and be as free as commercially practically of dry spots, lifts, and delamination. The lateral CIPP shall not inhibit the closed circuit television post video inspection of the mainline or service lateral pipes.

During the warranty period, any defects which will affect the integrity of strength of the CIPP shall be repaired at the Installer's expense in a manner mutually agreed upon by PWIRS and/or Director of Sewerage and the Installer.

After the work is completed, the Installer will provide PWIRS and Director of Sewerage with a videotape showing the completed work, including the restored conditions.

13.08 CLEAN-UP:

Upon acceptance of the installation work, the Installer shall reinstate the project area affected by his operations.

13.09 **POST VIDEO**:

At the completion of the rehabilitation of a pipe-line, the Contractor will provide PWIRS and/or Director of the Department of Sewerage with an electronic video inspection of the completed line segment. PWIRS and/or Director of the Department of Sewerage will use this inspection to determine if this line has been restored in a satisfactory fashion.

This inspection shall be performed, one section at a time, by closed circuit color television. The flow entering the section being inspected shall be plugged. The television camera used for this inspection shall be one that is specifically designed and constructed for such conditions. Picture quality and definition shall be to the complete satisfaction of PWIRS and/or Director of the Department of Sewerage. If necessary, equipment shall be removed and no payment made until satisfactory inspection is made. The camera shall be pushed through the pipe slowly, in order to fully inspect for any defects. Location records shall be kept by the Contractor, which will clearly show the exact location, in relation to adjacent manholes. A computer-generated copy of this log and data disc shall be supplied to PWIRS and/or Director of the Department of Sewerage.

TECHNICAL SPECIFICATIONS SECTION 14

<u>CIPP SERVICE LATERAL RECONSTRUCTION</u> <u>FROM MAINLINE PIPE (LONG SEGMENT)</u>

14.01 <u>DESCRIPTION:</u>

Work under this item shall provide for the rehabilitation of service lateral sanitary sewer lines, normally without excavation, by the installation of a resin-impregnated, flexible, felt tube inserted into the existing service lateral, utilizing a pressure apparatus positioned in the mainline pipe. Curing shall be accomplished by circulating hot water or other approved method to cure the resin into a hard impermeable pipe within-a-pipe. When cured, the cured-in-place pipe (CIPP) should extend over the length of the inversion in a continuous tight fitting, watertight pipe-within-a-pipe, to effect a water seal with the rehabilitated mainline pipe.

Materials shall be governed by the requirements of Technical Specifications Section 9 - "Pipe Rehabilitation by installation Cured-in-Place Pipe".

14.02 REFERENCE SPECIFICATIONS:

This specification references ASTM test methods, which are made a part hereof by such reference, and shall be the latest edition and revision thereof.

14.03 GENERAL CORROSION REQUIREMENTS:

The finished cured-in-place product shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage.

All constituent materials will be suitable for service in the environment intended. The final product will not deteriorate, corrode, or lose structural strength that will reduce the projected product life.

14.04 CIPP MATERIALS:

A flexible, felt tube shall be fabricated to a size that when installed will neatly fit the internal circumference of the conduit specified by the PWIRS and/or Director of Sewerage. Allowance shall be made for circumferential stretching during insertion.

The minimum length shall be that deemed necessary by the Installer, as approved by the Owner, to effectively span the distance from the lateral connection at the main to the desired termination location in the service lateral pipe. The installer shall verify the lengths in the field before the tube resin impregnation begins

One end of the tube shall include a flexible felt brim similar to the projectory edge of a top hat. This shall be a minimum 2 inches wide and shall be of the general size and angle of the service connection.

Unless otherwise specified, the Installer shall furnish a specially designed unsaturated, polyester resin and catalyst system compatible with the CIPP process that provides cured physical strengths specified herein.

14.05 PHYSICAL STRENGTH:

The structural performance of the finished pipe must be adequate to accommodate all anticipated loads throughout its design life. No cured-in-place pipe rehabilitation technology will be allowed that requires bonding to the existing pipe for any part of its structural strength. Only resin vacuum impregnation will be allowed. If reinforcing materials (fiberglass, etc.) are used, the reinforcing materials must be fully encapsulated within the resin, or at the interface of the CIPP and the existing pipe.

Design methods are to be derived from traditionally accepted pipe formulae for various loading parameters and modes of failure. All equations will be modified to include ovality as a design parameter. The design method shall be submitted to the Engineer for approval.

The final CIPP shall conform to the minimum structural standards listed below:

	Final CIPP	ASTM Standard	<u>Results</u>	
B	Flexible Stress	ASTM D790	4,500 psi	
psi	Flexural Modulus of Elasticity	AS	STM D790	250,000

The effectiveness of the seal between the installed service lateral CIPP and the mainline pipe shall be documented by third-party testing. A written report, which includes the test procedure and results shall be a required submittal to the Director of Sewerage and/or PWIRS for approval.

14.06 <u>INSTALLATION PREPARATION:</u>

The following installation procedures shall be adhered to, unless otherwise approved by the Owner's representative:

Safety – The Installer shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving entering confined spaces.

Cleaning of Sewer Line – It shall be the responsibility of the Installer to remove internal debris out of the sewer line (refer to standard sewer cleaning specification, as contained in Technical Specification Section 6 – Cleaning).

Inspection of pipelines - Inspection of pipelines shall be performed by experienced personnel, trained in locating breaks and obstacles by closed circuit television. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of CIPP into the pipelines, and it shall be noted so that these conditions can be corrected. A videotape and suitable log shall be kept for later reference by the Owner.

Bypassing Sewage - The Installer, when required, shall provide for the flow of sewage around the section or sections of mainline pipe where the service lateral designated for CIPP is located. The bypass shall be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole,

or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow.

It is required that the service lateral be inactive during the time of installation. This is normally accomplished by turning off the homeowner's services, or requesting that the homeowner refrain from using his services during the required period of installation.

Line Obstruction – It shall be the responsibility of the Installer to clear the line of obstructions such as solids, dropped joints, roots, or collapsed pipe that will prevent the insertion of the CIPP material. Should inspection reveal an obstruction that cannot be removed by conventional sewer cleaning equipment, the Installer shall make a point repair excavation to uncover and remove, or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative, prior to the commencement of the work, and shall be considered as a separate pay item.

14.07 CIPP INSTALLATION:

The Installer shall designate a location where the felt tube will be resin vacuum impregnated prior to installation. The Installer shall allow the Director of sewerage and/or PWIRS to inspect the material and resin impregnation procedure. A catalyst system compatible with the resin and felt tube shall be used.

The resin impregnated tube shall be loaded inside pressure apparatus above ground. The pressure apparatus, with an end attached to a robotic device shall be winched through the mainline pipe to the service connection. The robotic device, together with a television camera will be used to position the pressure apparatus' inversion elbow at the service connection opening. Air pressure, supplied to the pressure apparatus through an air hose, shall be used to invert the resin impregnated tube though the lateral pipe. The inversion head will be adjusted to be of sufficient pressure to cause the impregnated tube to invert completely in the lateral pipe and hold the tube tight to the pipe wall. Care shall be taken timing the elevated curing temperatures so as not to over-stress the tube.

The pressure apparatus shall include a bladder, which inflates in the mainline pipe, effectively seating the brim portion of the tube tightly against the service connection.

Curing — After inversion is completed, the Installer shall supply a suitable heat source and water recirculation equipment. The equipment shall be capable of delivering hot water or other approved heat source throughout the section, by means of a pre-strung hose to uniformly raise the water temperature above the temperature required to affect a cure of the resin. This temperature shall be determined by the resin/catalyst system employed.

The heat source shall he fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply. Water temperature in the line during the cure period shall be as recommended by the resin manufacturer.

Initial cure shall be deemed to be completed when the exposed portions of the CIPP appear to be hard and sound, and the temperature gauge indicates that the temperature is of a magnitude to realize an exotherm. The cure period shall be of a duration recommended by the resin manufacturer, as modified for the CIPP process, during which time the recirculation of the water and cycling of the heat exchanger to maintain the temperature continues.

Cool-down —The Installer shall cool the hardened CIPP to a temperature below 100 degrees Fahrenheit before relieving the pressure in the pressure apparatus. Care shall be taken to maintain proper pressure throughout the cure and cool-down period. Cool-down may be accomplished by the introduction of cool air into the pressure apparatus, to replace water being forced out of the pressure apparatus. Care shall be taken to maintain proper pressure throughout the cure and cool-down period.

Finish - The finished CIPP shall be continuous over the entire length of an inversion run, and be as free as commercially practical of dry spots, lifts, and delamination. The lateral CIPP shall not inhibit the closed circuit television post video inspection of the mainline or service lateral pipes.

During the warranty period, any defects, which will affect the integrity of strength of the CIPP shall be repaired at the Installer's expense in a manner mutually agreed upon by the Owner and the Installer.

After the work is completed, the Installer will electronically provide PWIRS and/or Director of Sewerage with data showing the completed work, including the restored conditions.

14.08 CLEAN-UP:

Upon acceptance of the installation work, the Installer shall reinstate the project area affected by his operations.

14.09 POST VIDEOS:

At the completion of the rehabilitation of a pipe-line, the Contractor will electronically provide PWIRS and/or Director of the Department of Sewerage with video of the completed line segment. This inspection will be used to determine if the line has been restored in a satisfactory fashion.

This inspection shall be performed, one section at a time, by closed circuit color television. The flow entering the section being inspected shall be plugged. The television camera used for this inspection shall be one that is specifically designed and constructed for such conditions. Picture quality and definition shall be to the complete satisfaction of PWIRS and/or Director of the Department of Sewerage. If necessary, equipment shall be removed and no payment made until satisfactory inspection is made. The camera shall be pulled through the pipe slowly, in order to fully inspect for any defects. Location records shall be kept by the Contractor, which will clearly show the exact location, in relation to adjacent manholes, of all house connections. A computer-generated copy of this log shall be electronically supplied to PWIRS and/or Director of Department of Sewerage.

TECHNICAL SPECIFICATIONS SECTION 15

LATERAL CONNECTION RECONSTRUCTION FROM MAINLINE BY CIPP METHODS (SHORT SEGMENT)

15.01 <u>DESCRIPTION:</u>

Work under this item will consist of the reconstruction of service lateral connection, normally without excavation, by the installation of the resin impregnated flexible felt tube inverted into the existing service lateral utilizing an apparatus positioned in the mainline pipe. Curing shall be accomplished by circulating hot water, or other approved method, to cure the resin into a hard impermeable pipe. When cured, the pipe should extend over the length of the inversion in a continuous tight fitting, watertight, pipe-within-a-pipe, to affect a seal with the reconstructed pipe. This method will be used in locations where no clean out exists, and installation of one to five foot lengths of lining material would repair/reinforce the lateral to mainline connection.

Materials shall be governed by the requirements of Technical Specification Section 9 – "Pipe Rehabilitation by installation of Cured-in-Place-Pipe".

15.02 METHOD:

A resin impregnated tube is loaded inside a pressure apparatus above ground. In the case of a non-man entry pipe, the pressure apparatus is attached to a robotic placement device and winched through the main pipe to the service connection. Air supplied to the pressure apparatus is used to invert the Tube and hold it tightly against the lateral pipe wall. Pressure is maintained throughout a heat induced cure, by either air/stream pressure, hot water pressure, or a combination of both. Upon completion of cure, the pressure apparatus is removed, leaving the newly formed CIPP.

This method involves the use of standard and non-standard felt tubes and inversion techniques, and a "Top Hat" seal at the mainline, in order to produce a CIPP in the lateral with one end remotely accessible, and the other end not

accessible. Utilizing this method there is no subsequent cutting and trimming, nor a remote end to be stripped out.

TECHNICAL SPECIFICATIONS SECTION 16

PRESSURIZED FORCE MAIN PIPE REHABILITATION BY REINFORCED CURED-IN-PLACE PIPE

16.01 **GENERAL**:

It is the intent of this specification to provide for the reconstruction of existing pressurized sewer force main by installing a Reinforced Cured-In-Place Pressure Pipe (RCPP) within an existing structurally deteriorated pipe, which has maintained its original shape. The rehabilitation shall be accomplished by the use of the Insituform® RPP Process, or an Engineer approved equal. Contractor will submit with bid all data on RCPP rehabilitation process for approval. The process is defined as the reconstruction of a deteriorated sanitary pressure pipe by installation of a thermosetting, resin impregnated, reinforced flexible felt/fiber tube (coated on one side with polyethylene), utilizing a water column. Curing is accomplished by circulating hot water (or other approved fluid) throughout the length of the tube to cure the thermosetting resin into a hard impermeable pipe. The pipe shall extend the full length of the original pipe, and shall provide a structurally sound, jointless, close-fitting, cured-in-place pressure pipe.

16.02 REFERENCED SPECIFICATIONS:

This specification references ASTM F1216 (Rehabilitation of pipelines by inversion and curing a resin impregnated tube), and ASTM D5813 (Cured-In-Place, Thermosetting Resin Sewer Pipe). In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

16.03 GENERAL CORROSION REQUIREMENTS:

The RCPP shall be fabricated from materials which, when cured, will be chemically resistant to withstand internal exposure to permitted storm water and sanitary sewerage.

16.04 MATERIALS:

- A. The reinforced flexible felt/fiber tube shall be fabricated to a size that, when installed, will neatly fit the internal circumference of the conduit Nominal tube thickness shall be per design guidelines specified herein, and indicated on the bid form. Additional thicknesses will be used as required by design requirements.
- B. The minimum length shall be that deemed necessary by the Contractor to effectively span the distance from the inlet to the outlet of the respective termination points, unless otherwise specified. The Contractor shall verify the lengths in the field before impregnation of the tube with resin.

- C. Unless otherwise specified, the Contractor shall furnish a flexible vinyl ester resin and catalyst system, such as Dow Derekane 411 or Interplastic 8319, which provides cured physical strengths as specified herein.
- D. The materials used shall result in an installed CIPP flow capacity, which will be equal to, or greater than, 100% of the original pipe's flow capacity when new.
- E. Internal mechanical compression fit end seals will be required to seal the ends of the RCPP within the existing force main. Victaulic Depend-O-Lock (BRICO) end seals, or approved equal are required.

16.05 <u>DESIGN REQUIREMENTS:</u>

A. Physical Strength: The RCPP shall conform to the minimum standards, listed below, or to the current standards approved by ASTM. Pipe thickness shall be designed per ASTM F1216-X1. Long Term Tensile Strength value retention shall be no more than 35% for design purposes.

Physical Property	Test Method	Minimum Value
Flexural Stress Tensile Strength	#101 (Modified ASTM D-790)	4,500 psi 3,500 psi
Flexural Modulus of Elasticity	#101 (Modified ASTM D-790)	250,000 psi

B. The RCPP shall be designed to withstand internal pressures of up to 40 PSI as a standalone pipe (fully deteriorated host pipe). Design calculations will be submitted to the owner for review prior to commencement of work. Burial depths of most mains are approximately 7 feet deep.

16.06 PRE-INSTALLATION PROCEDURES:

The following installation procedures shall be adhered to, unless otherwise approved by PWIRS and/or Director of the Department of Sewerage.

- A. Safety The Contractor shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving work on an elevated platform and entry into a confined space.
- B. *Pre-inversion Cleaning* It shall be the responsibility of the Contractor to remove all loose debris which is located within the sanitary or storm sewer pipe.

- C. Pre-inversion Inspection Inspection of sanitary or storm sewer pipe shall be performed by experienced personnel, trained in the location of breaks, obstacles, and connections by closed circuit television inspection. The interior of the pipe shall be carefully inspected to determine the location of any conditions which may prevent the proper installation of the RCPP, and it shall be noted so that these conditions can be corrected. A videotape and suitable log shall be kept for later reference by the Owner and/or Contractor.
- D. Line Obstructions If inspection reveals an Obstruction or Protrusion that cannot be removed by conventional pipe cleaning equipment, such as attached mortar, dropped joints, protruding taps, or collapsed pipe that will prevent completion of the inversion process, a point repair shall be made by the Department of Sewerage, or the Department of Sewerage designated Contractor.
- E. By-passing When required for acceptable completion of an inversion process task and/or to avoid damages due to sewer spills or overflows, the Contractor shall provide for sanitary or storm water flow maintenance around the section or sections of pipe designated for the inversion process. The bypass shall typically be made by plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole, or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the anticipated flow. Bypassing of sanitary sewerage into the storm water system will not be allowed.

16.07 INSTALLATION PROCEDURES:

- A. Wet Out The Contractor shall wet-out the RCPP tube using distribution rollers and vacuum to thoroughly saturate the felt fiber tube prior to installation. The Contractor shall allow PWIRS and/or Director of the Department of Sewerage to inspect the materials and wet out procedure. A catalyst system compatible with the resin and tube shall be used.
- B. Insertion The wet out tube shall be inserted through an approved access, and the application of a fluid column sufficient to fully extend it to the next designated termination point. The fluid column will be adjusted to be of sufficient height to cause the impregnated tube to hold tight against the existing pipe wall.
- C. Curing After the insertion is completed, the Contractor shall supply a suitable heat source and circulation system, capable of delivering hot fluid uniformly throughout the section, to effect a consistent cure of the resin. The curing schedule shall be that recommended by the resin/catalyst system manufacturer for pipeline rehabilitation.
- D. Cool-down The Contractor shall cool the hardened RCPP to a temperature below 100 degrees Fahrenheit before relieving the fluid column. A constant fluid column height is to be maintained until cool-down is completed. Care shall be taken in the release of the fluid column, so that a vacuum will not be developed that could damage the newly installed CIPP.
- E. Warranty The finished CIPP shall be continuous over the entire length of an inversion run and be as free as commercially practicable from visual defects. It shall also meet the water tightness test requirements specified below. During the warranty period, any defects which will affect the integrity or strength of the CIPP shall be repaired at the Contractor's expense in a manner mutually agreed to by the and the Contractor. The warranty period is for five years after the date of completion.

16.08 <u>SEALING AT TERMINATIONS:</u>

Contractor shall install an internal compression fit mechanical seal at the ends of the newly installed RCPP to prevent any leakage. Victaulic Depend-O-Lock (BRICO) end seals, or approved equal are required.

16.09 TESTING:

The water tightness of the CIPP shall be gauged by monitoring the water level in the inversion tube while curing. The water testing must be done directly on the finished product.

A service test will be performed after the installation is complete with the termination points exposed for inspection. The force main will be placed in service and observed for a 24 hour period. Any leaks of the rehabilitated pipe shall be corrected by the contractor, at no cost to Jefferson Parish.

For each work order requested by the Department of Sewerage, the Contractor shall perform a test on a sample of the cured installed liner. These tests will be conducted in accordance with Modified ASTM D-790 and shall include the following:

- a. Thickness of sample
- Flexural strength
- c. Tensile Strength
- d. Flexural modulus of elasticity

The final installed RCPP thickness must meet or exceed the minimum design thickness calculated for the installation to be deemed acceptable by the owner.

16.10 CLEAN-UP:

Upon acceptance of the installation work and testing, the Contractor shall reinstate the project area affected by contractor's operations.

16.11 POST REHABILITATION VIDEOS:

At the completion of the rehabilitation of a pipe-line, the Contractor will provide PWIRS and/or Director of the Department of Sewerage with an electronic video inspection of the completed line segment. This inspection will be used to determine if this line has been restored in a satisfactory fashion.

This inspection shall be performed, one section at a time, by closed circuit color television, using a radial view camera. The flow entering the section being inspected shall be plugged, as required and previously described. The television camera used for this inspection shall be one that is specifically designed and constructed for such conditions. Picture quality and definition shall be to the complete satisfaction of PWIRS and/or Director of the Department of Sewerage. If necessary, equipment shall be removed and no payment made until satisfactory inspection is made. The camera shall be pulled through the pipe slowly, in order to fully inspect for any defects. Location records shall be kept by the Contractor, which will clearly show the exact location, in relation to adjacent manholes, of all house connections. A computer-generated copy of this log and data disc shall be supplied to PWIRS and/or Director of the Department of Sewerage.

16.12 PATENTS:

The Contractor shall warrant to the Department of Sewerage that the methods, materials, and equipment used herein, where covered by license, are furnished in accordance with such license(s) and the prices included in this proposal include any and all applicable royalties and fees in accordance with such license(s). The Contractor shall warrant and save harmless the Jefferson Parish against all claims for patent infringement and any loss thereof.

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TECHNICAL SPECIFICATIONS SECTION 17

CHEMICAL GROUT TO FILL VOIDS AND STOP LEAKS IN STRUCTURES

17.01 <u>SCOPE OF WORK:</u>

To provide chemical grout injection that fills voids on the exterior of below-grade structures and stops leaks in below grade structures.

This specification shall govern all work, materials, and equipment required for chemical grout injection for the purpose of filling voids on the exterior of belowgrade structures and stopping leaks in below grade structures.

Described are procedures for mixing, performance, and cleaning. The applicator, approved and trained by the manufacturer shall furnish all labor, equipment, and materials for applying chemical grout injection with machinery specially designed for application. All aspects of the installation shall be in accordance with the manufacturer's recommendation and approved by the manufacturer.

Approved cementitious lining materials are those manufactured by:

- 1. AV-278/279 Low Vis Hydro.
- 2. Engineer approved equal

17.02 PROPERTIES:

The Chemical Grout provided shall have the following minimum requirements:

A. AV-278 - UNCURED

Appearance: Brown resin

Viscosity: 25 – 100 cP @ 72°F (22°C)

Flash Point: >200°F (>93°C)

Specific Gravity: 1.171 @ 72°F (22°C) ± 3%

Weight: $9.74 \text{ lb/gal} \pm 3\% (1.167 \text{ kg/L} \pm 3\%)$

B. AV-278 – CURED

Appearance: Milky colored rigid foam

Compressive Strength: TBD

Toxicity: Non-toxic

C. AV-279 Low Vis Hydro Accel

Appearance: Light yellow liquid

Viscosity: 10 cP @ 72°F (22°C)

Flash Point: >200°F (>93°C)

Specific Gravity: 0.986 @ 72°F (22°C) ± 3%

Weight: 8.21 lb/gal ± 3% (0.984 kg/L ± 3%)

17.03 MIX PROCEDURE:

Depending on the desired reaction time, up to one container of AV-279 Low Vis Accel can be used (refer to manufacturer's chart regarding reaction time). Do not use more than one container of AV-279. Mix thoroughly, but slowly, to avoid creating bubbles in the solution (air bubbles will turn into moisture). Perform the standard cup test with site water to determine the desired reaction time.

17.04 <u>PERFORMANCE</u>:

Flush equipment with AV-208 before and after use to remove moisture and clean equipment. Performance will be influenced by site conditions. If site temperatures are low, heat the product to recommended operating temperatures of 60-90 degrees Fahrenheit (16-32 degrees Celsius), and/or increase catalyst amount by 1% - 2%. Do not use open flame as a heat source. Excess amounts of AV-279 may adversely affect performance. Because catalyzed resin will react to moisture from the air, use product soon after mixing for best results.

17.05 STORAGE:

Store in temperatures within or near 60 – 100 degrees Fahrenheit (16 – 38 Celsius) in a dry atmosphere.

17.06 **WATER**

degrees

Water shall be clean and potable. Questionable water shall be tested by a testing laboratory, in accordance with ASTM C-04. Potable water need not be tested.

17.07 GROUTING TECHNIQUES:

The following grouting techniques may be utilized for application of the chemical grout:

- Probe Grouting
- Curtain Grouting
- Pressure Injection

17.08 <u>CLEANING OF EQUIPMENT:</u>

The following cleaning products shall be utilized for cleaning of equipment once application is complete:

- AV-208 Acetone, Technical Grade (CAS# 67-64-1) removes moisture from equipment
- AV-284 Pump Wash (Proprietary Blend) removes uncured resin from pump and hose
- AV-222 Cleaner (Proprietary Blend) removes cured resin from equipment

17.09 HANDLING AND STORAGE:

A. Precautions for Safe Handling

- Keep away from sources of ignition
- No smoking
- Keep away from heat and open flame
- Avoid all eye and skin contact
- Do not breathe vapor or mist
- Always wash hands after handling
- Do not eat, drink, or smoke when using this product
- Ensure there is adequate ventilation
- Wear recommended personal protective equipment
- Take precautionary measures against static discharge
- Use grounded electrical/mechanical equipment

B. Hygiene Measures

- Handle in accordance with good industrial hygiene and safety procedures
- Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking, and when leaving work

C. Conditions for Safe Storage (Including Any Incompatibilities)

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool, and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures, and incompatible materials. Shelf life is 6 months in unopened containers.

Incompatible Products: Isocyanates react slowly with water, alcohols, amines, acids, and bases.

17.10 <u>WEATHER:</u>

Contractor will apply Cementitious lining in accordance with manufacturers requirements concerning weather conditions.

17.11 WARRANTY:

Contractor will warrant that installation of the Chemical Grout was performed in accordance with manufacturer's recommendation. Contractor will also warrant that the area repaired will remain free from defects, failure of the grout due to defective material, installation, or workmanship for a period of five years from the date of completion.

TECHNICAL SPECIFICATIONS SECTION 18

SEWER MANHOLE/WET WELL REHABILITATION BY A CEMENTITIOUS LINING METHOD

PRODUCT SPECIFICATION FOR CEMENTITIOUS LINING

18.01 SCOPE OF WORK:

To provide a system for manhole reconstruction. Stops inflow, infiltration, exfiltration, restores structural integrity, and provides protection against corrosion.

This specification shall govern all work, materials, and equipment required for manhole rehabilitation for the purpose of eliminating infiltration, providing corrosion protection, repair of voids, and restoration of the structural integrity of the manhole, as a result of applying a monolithic fiber-reinforced structural/structurally enhanced Cementitious liner to the wall and bench surfaces of brick, concrete, or any other masonry construction materials.

Described are procedures for manhole preparation, cleaning, application, and testing. The applicator, approved and trained by the manufacturer shall furnish all labor, equipment, and materials for applying a Cementitious mix to form a monolithic liner of a minimum ½ inch thickness with machinery specially designed for application. All aspects of the installation shall be in accordance with the manufacturer's recommendation and approved by the manufacturer.

Approved cementitious lining materials are those manufactured by:

- AP/M Permaform Johnston, IA.
- 2. Department of Sewerage approved equal

18.02 PATCHING MIX:

A quick setting cementitious material, shall be used as a patching mix, and is to be mixed and applied according to manufacturer's recommendations. It shall have the following minimum requirements:

A. Compressive Strength (ASTM C-109) 6 Hrs. 1400 psi

B. Shrinkage (ASTM C-596) 0% at 90% R.H.

C. Bond (ASTM C-321) 28 days, 150 psi

D. Density, when applied 105+ (-) pcf

18.03 <u>INFILTRATION CONTROL MIX:</u>

A rapid setting Cementitious product, specifically formulated for leak control, shall be used to stop minor water infiltration, and shall be mixed and supplied according to manufacturer's recommendations. It shall have the following minimum requirements:

A. Compressive Strength (ASTM C109)

600 psi 1 hour

1000 psi 24 Hrs.

B. Bond (ASTM C-32)

30 psi 1 hour

80 psi 24 Hrs.

18.04 **GROUTING MIX:**

- A. Cementitious grout shall be used for stopping very active infiltration and filling voids. It shall be mixed and applied according to manufacturer's recommendations. The Cementitious grout shall be volume stable, and have a minimum 28 day compressive strength of 250 psi, and a one (1) day strength of 50 psi.
- B. Chemical grouts may be used for stopping very active infiltration and shall be mixed and applied per manufacturer's recommendations.

18.05 **LINER MIX**:

A Cementitious liner, shall be used to form a structural/structurally enhanced monolithic liner covering all interior manhole surfaces. It shall have the following minimum requirement at 28 days:

A. Compressive Strength (ASTM C-190)

10,000 psi

B. Tensile Strength (ASTM C-496)

600 psi

C. Flexural Strength (ASTM C-293)

600 psi

D. Shrinkage (ASTM C-596) @ 90 degrees relative humidity

0% psi

E. Bond (ASTM C-321)

130 psi

F. Density, when applied

105+ (-) pcf

1. The Cementitious Liner shall be made with Calcium Aluminate Cement and shall be used according to manufacturer's recommendations in applications where there is evidence of sever sulfide conditions (pH less than 3.0).

18.06 **WATER**

Water shall be clean and potable. Questionable water shall be tested by a testing laboratory, in accordance with ASTM C-04. Potable water need not be tested.

18.07 OTHER MATERIALS:

No other material shall be used with the mixes described in 18.02, 18.03, 18.04, and 18.05, without prior approval, or recommendations from the manufacturer.

18.08 **EQUIPMENT**:

A. Specially designed machines consisting of an optimized progressive cavity pump capable of producing a minimum of 250 psi pumping pressure, contrablend mixer with twin ribbon paddle with end discharge, and an air system for spray application of product, shall be used for applying the Cementitious lining. B. The Contractor will be responsible for ensuring that application and installation of the cementitious liner is made in accordance with, and approved by the manufacturer.

18.09 PREPARATION:

- A. Place covers over invert to prevent extraneous materials from entering the sewer lines
- B. All foreign material shall be removed from the manhole wall and bench, using a high pressure water spray (minimum 1200 psi). Loose and protruding brick, mortar, and concrete shall be removed, using a mason's hammer and chisel and/or scraper. Fill any large voids with quick setting patching mix (paragraph 18.02)
- C. Active leaks shall be stopped using quick setting, specially formulated mixes (paragraphs 18.03 and 18.04) according to manufacturer's recommendations. Some leaks may require weep holes to localize the infiltration during the application, after which the weep holes shall be plugged with the quick setting mix (paragraph 18.03) prior to the final liner application. When severe infiltration is present, drilling may be required in order to pressure grout using a cementitious grout (paragraph 18.04). Manufacturer's recommendation shall be followed when pressure grouting is required.

18.10 INVERT REPAIR:

- A. After all preparation has been completed, remove all loose materials and wash wall again.
- B. Any bench, invert, or service line repairs shall be made at this time, using the quick setting patching mix (paragraph 18.02). It shall be used per manufacturer's recommendations.
- C. Invert repair shall be performed on all inverts with visible damage or infiltration. After blocking flow through the manhole, and thoroughly cleaning invert, the quick setting patch mix (paragraph 18.02) shall be applied to the invert in an expeditious manner. The mix shall be troweled uniform onto the damaged invert, extending out onto the base of the manhole sufficiently to tie into the structural/structurally enhance monolithic liner to be applied. The finished invert surfaces shall be smooth and free of ridges. The flow may be re-established in the manhole within 30 minutes after placement of the mix.

18.11 MIXING:

A. For each bag of product, use the amount of water specified by the manufacturer and mix using the approved equipment, and in accordance

with the manufacturer's recommendations.

B. Place the mix into the holding hopper, and prepare another batch with timing such that the nozzle man can spray in a continuous manner, without interruption, until each application is complete.

18.12 SPRAYING:

1st Application

A. The surface prior to spraying shall be clean, free of all foreign material, and shall be damp, without noticeable free water droplets or running water, but totally saturated, just prior to application. Materials shall be spray applied from the bottom of the wall to the top, to a minimum uniform thickness to insure that all cracks, crevices, and voids are filled and a relatively smooth surface remains right after troweling. The light troweling is performed to compact the material into voids and to set the bond.

2nd Application

B. A second application is applied after the 1st application has begun to take an initial set (disappearance of surface sheen which could be 15 minutes to 1 hour, depending on ambient conditions) to assure a minimum total finished thickness of ½ inch. Again, application shall be from the bottom up. The surface is then troweled to a smooth finish, being careful not to over trowel, so as to bring additional water to the surface and weaken it. Manufacturer's recommendations shall be followed whenever more than 24 hours have elapsed between applications. A brush finish is acceptable, and is applicator's option.

3rd Application

C. The wooden covers shall be removed at this time and the bench sprayed such that a gradual slope is produced from the walls to the invert, with the thickness at the edge of the invert being no less than ½ inch. The wall/bench intersection shall be rounded to a uniform radius the full circumference of the intersection.

Mortar shall be installed when ambient temperatures are above 40 degrees Fahrenheit. Applying at temperatures below 40 degrees Fahrenheit is not recommended.

18.13 **CURING:**

Caution shall be taken to minimize exposure of applied product to sunlight and air movement. If application of 2nd coat is to be longer than 15 minutes after completion of application of 1st coat, the manhole cover shall be set back in place. At no time should the finished product be exposed to sunlight or air movement for longer than 15 minutes before replacing the manhole cover. In extremely hot and arid climates, manhole should be shaded while reconstruction is in process.

The final application shall have a minimum of four (4) hours cure time before being subjected to active flow.

Traffic shall not be allowed over manholes for 24 hours after reconstruction is complete.

18.14 WEATHER:

Contractor will apply Cementitious lining in accordance with manufacturers requirements concerning weather conditions.

18.15 PRODUCT TESTING:

Four – 2 inch cubes shall be cast each day, or from every 50 bags of product used, and shall be properly labeled and sent in for testing, in accordance with the Owner's or Manufacturer's directions, for compression strength testing, as described in ASTM C-109.

18.16 FINAL ACCEPTANCE TESTING:

At the direction of the Department of Sewerage or his assignee, the rehabilitated manholes shall be tested as follows:

Visually verify the absence of leaks.

Perform an exfiltration test as follows:

- A. For manholes 0 6 foot deep If water loss is one (1) inch or less in five minutes manhole is acceptable.
- B. For manholes over 6 foot deep If water loss is one (1) inch or less plus 1/8 inch per additional foot of depth in five minutes, manhole is acceptable.

18.17 <u>VACUUM TEST:</u>

Vacuum Test Timetable Manhole Diameter:

Depth - feet	48 inches	60 inches	72 inches	96 inches
4	10 sec.	13 sec.	16 sec.	19 sec.
8	20 sec.	26 sec.	32 sec.	38 sec.
12	30 sec.	39 sec.	48 sec.	57 sec.
16	40 sec.	52 sec.	64 sec.	76 sec.
20	50 sec.	65 sec.	80 sec.	95 sec.
24	60 sec.	78 sec.	96 sec.	114 sec.
+ Each 2'	+5 sec.	+6.5 sec.	+8.0 sec.	+9.5 sec.

- A. Manhole depths shall be rounded to the nearest foot. Testing times for intermediate values of manhole depth shall be interpolated. For manhole depths greater than 24 feet, the values shown in the last line of the table shall be added to the 24-foot value for each additional 2 feet of depth.
- B. If the manhole or structure fails the vacuum test, the Contractor shall perform additional repairs and repeat the test procedures until satisfactory results are obtained.
- C. After the manhole rehabilitation work has been completed, the Contractor shall allow the manhole to be visually inspected by the PWIRS. The finished surface shall be free of blisters, "runs", "sags", or other indications of uneven lining thickness. There shall be no evidence of visible leaks.

18.18 WARRANTY:

Contractor will warrant that installation of the cementitious liner was performed in accordance with manufacturer's recommendation. Contractor will further warrant that the work performed will remain free from defects, failure of the liner due to defective material, installation, or workmanship for a period of five years from the date of completion.

TECHNICAL SPECIFICATIONS SECTION 19 EPOXY LINING

19.01 **GENERAL**:

This section describes the minimum standards for the safe and efficient renewal of cylindrical or flat walled sewer structures, such as manholes and wet wells, by the application of an epoxy liner to the walls and bench. This work shall only be performed at locations directed by the Director for the Department of Sewerage or PWIRS, and only upon successful completion of a cementitious liner as specified in Section 18.

19.02 MATERIALS:

The protective coating shall be a two-component, moisture insensitive epoxy system, SG Mastic. It shall be specifically designed for the protection of sanitary manholes, wet wells, and valve vaults. Paste-like viscosity recommended for coating of horizontal, vertical, and overhead surfaces. Non-Sag consistency; will not sag at thickness of .25 inch. Minimum physical properties shall be:

ASTM D 638

7 680 DSI

rensile Strength	A31101 D-030	7,000 FSI
Compressive Strength	ASTM D-695	7 Day 13,600 PSI
Flexural Strength	ASTM D-790	13, 200 PSI
Bond Strength	ASTM D-790	14 Day 3,300 PSI
Shear Strength	ASTM D-732	4,600 PSI

19.03 PREPARATION & PRODEDURE:

Tancila Strangth

The Portland based Liner shall be applied to the prepared interior as specified in Section 18, at the thickness necessary to restore the full cross-sectional thickness of the original wall. The Liner shall have successfully demonstrated its compatibility to mechanically interface permanently with the coating.

B. The epoxy shall be uniformly centrifugally cast onto the fresh mortar lining before re-exposure to the chemicals can contaminate the underlying mortar. If application is delayed beyond 24 hours, the mortar liner shall be rinsed to neutralize its surface and the epoxy shall then be applied. The epoxy shall have a minimum thickness of .065 inches (65 mils) and shall not run or sag

during placement. Performance standard shall be SG Mastic by Dinjer, Inc., or approved equal.

C. SG Mastic, or approved equal, shall be applied when the mortar has taken a final set (8-12 hours), or when moisture from free water escapes during hydration is no longer observed. Ambient temperatures shall be above 40 degrees Fahrenheit. Cold surfaces will delay set time. Minimum surface temperature shall be 50 degrees Fahrenheit.

19.04 <u>TESTING AND VERIFICATION:</u>

The interior shall be visually inspected for thoroughness of coverage. When dry to the touch, the entire interior shall be tested with a holiday detector at the prescribed voltage to verify thickness and locate pinholes, if any. Deficiencies shall be immediately corrected and retested.

Contractor will warranty that installation of the epoxy liner was performed in accordance with manufacturer's recommendation, and will remain free from defects or workmanship deficiencies for a period of five years from the date of completion.

19.05 <u>SAFETY:</u>

Should personnel be required to enter enclosed spaces during the application procedure, all OSHA requirements, as well as those required by the manufacturer's material safety data sheet shall be adhered to.

TECHNICAL SPECIFICATIONS SECTION 20

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TECHNICAL SPECIFICATIONS SECTION 21

REMOVAL AND RESTORATION OF ROADWAYS, CONCRETE CURB AND GUTTER, SIDEWALK AND DRIVEWAYS

21.01 <u>DESCRIPTION</u>:

All work performed under this Section shall be in accordance with the appropriate section of the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 edition or latest revisions), and/or Jefferson Parish Standard Details, unless modified herein or directed in the field. American Disability Act (ADA) requirements, as well as other Federal, State, or local code requirements will apply.

This section shall include the removal and restoration of all paved and unpaved roadway and walkway areas encountered on the project. This work will include replacement of pavements, shell surfaces, base courses, curbs, gutters, and other improvements removed or damaged by the Contractor during the course of this Contract.

The unit bid price for a removal and replacement item shall include the cost of removal, saw-cutting as required, transportation, and proper disposal of the removed material, placement AND REMOVAL of temporary walking/parking surface in sidewalk and driveway area (crushed limestone), as well as actual permanent replacement cost.

Under no circumstances will removed concrete or asphalt material be allowed to be stockpiled at the site. All debris is to be removed from the site at the end of the work day. The Contractor is not allowed to stockpile any new roadway bedding material in roadways overnight.

Temporary asphalt surfacing will be used in roadway/parking locations as directed by the Engineer. This asphalt will be placed upon completion of work, with permanent repair being made in approximately 30 days. Payment for placement of temporary asphalt will be made under the applicable bid item. Temporary asphalt shall be marked "TEMPORARY" in bright yellow paint.

Unless otherwise approved by the Director of the Department of Sewerage, the kind of pavement to be constructed in replacement work shall correspond with the kind removed from the area, or as shown on the detail sheet. The respective kind of concrete (asphalt or Portland cement) shall be placed, shaped, and finished to establish grade and cross section by practicable means, which will result in a dense, uniform-textured pavement. Abutting edges of old pavement shall be trimmed of all loose fragments and shall be painted with asphalt or thoroughly moistened with water, as appropriate, to provide good bond between the old and new pavement.

All manholes within the pavement area shall be isolated (boxed out) by means of an approved circular ring (joint) around them, square or rectangular sections using flexible joint material. Manholes in sidewalk areas will be formed so that an expansion joint is on both sides of the manhole.

All backfilled trenches shall be properly maintained by the Contractor, at no direct pay, until such time as reconstruction begins.

Drawings included in these Contract Documents reflect "Typical roadway restoration details".

NOTICE: The Contractor is responsible for notifying both the PWIRS, testing lab, representative, and Jefferson Department of Sewerage at least 24 hours in advance of any placement of concrete or asphalt.

In addition, the Contractor shall be responsible for the proper and safe protection of the work area.

21.02 REMOVAL OF SURFACING:

All surfaces shall be initially removed to a distance of one (1) foot outside the limits of the trench. Upon completion of all work, all concrete shall be removed and replaced to the nearest joint, unless otherwise directed by the PWIRS or Jefferson Parish Department of Sewerage. Final removal of asphalted concrete roadways shall be to a minimum distance of three (3) feet from the edge of trench and neat lined at this point. For driveway and sidewalk removal, if a joint does not exist at the property line or in close proximity to it, then the Contractor shall make a saw-cut along the property line. There will be no direct payment for saw-cutting. Material removed shall be properly disposed of at no direct pay.

There will be no direct payment for the removal of curb, which is attached to and removed with the roadway surface.

21.03 BASE COURSE:

This work consists of furnishing and placing granular material for the roadway base, as per plan details, and in accordance with of the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions), unless otherwise specified.

The placement of the road base material shall be confined to the <u>limits of the trench line</u>. If, due to the construction operation, the adjacent base material is disturbed adversely, the Contractor shall remove and replace the material, as directed by the PWIRS in consultation with the Department of Sewerage. This work shall be done at the Contractor's cost, unless the disturbance is beyond the Contractor's control.

Density tests will be taken on the roadway base materials, as directed by the PWIRS and/or Director of Sewerage. The Contractor shall not be allowed to restore the roadway until the road base material in the trench area meet, or exceed the following:

Density Requirements (Standard Proctor)

A.	Base Coarse (sand)	-97%
B.	Base Course (stone)	-95%
C.	Sub-base (sand)	-97%

21.04 BASE MATERIAL:

Soil for base material shall be pumped sand obtained from the Mississippi River. It shall be an AASHTO Classification A-4 or better, having a Plasticity Index not to exceed "4", and a liquid not to exceed "25", and shall be free from trash, weeds, large lumps, humus, or any other deleterious matter.

21.05 ASPHALT CONCRETE PAVING:

A. PERMANENT RE-SURFACING:

All materials and construction under this section shall conform to the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions), unless otherwise specified. The gradation of the mix shall be Type 3, AC-30 for any temporary repairs, as well as the permanent Wearing Course and Binder Course as per the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions), unless otherwise specified.. The thickness of each course is as shown on the standard details.

Saw-cutting will be required along the entire limits of the removed asphalt area; if in contract with existing asphalt.

Job Mix Formula (per latest DOTD Standards)

Wearing Course (Type 3, AC-30)

2. Binder Course (Type 3, AC-30)

3. Base Course (Type 5A, AC-30)

B. TEMPORARY RE-SURFACING:

Until permanent roadway pavement surfacing is placed, temporary asphalt re-surfacing, a minimum of 2 inches thick shall be placed and maintained at locations determined by the Director of Sewerage and/or PWIRS. At major intersections and critical locations, a greater thickness may be ordered. Temporary resurfacing shall be placed as soon as the condition of the backfill is suitable to receive it, and shall remain in place until the condition of the backfill is suitable for permanent re-surfacing.

The temporary asphaltic concrete shall be any type mixture listed in, except Type 5B, of the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions).

Prior to placing temporary re-surfacing, the Contractor shall level and compact the backfill on which the surfacing is to be placed. The grade of the backfill on which the re-surfacing is to be placed shall be such as to provide the full thickness of temporary re-surfacing specified. The temporary resurfacing shall be placed, rolled, maintained, and removed and disposed of by the Contractor. All temporary re-surfacing shall be marked "TEMPORARY" in bright yellow paint.

21.06 CONCRETE PAVEMENT:

All materials and construction under this section shall conform to the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions), unless otherwise specified.

All existing concrete pavement, curbs, walks, and driveways shall be replaced to the line, grade, and thickness that existed prior to construction, or as directed by the Department of Engineering. Details of existing joints will be supplied at the time of construction. Prior to construction in an area, the Contractor shall adequately reference the existing curb and other pavement elevations to establish the pre-construction conditions.

The restored paving elevations shall correspond to the elevations established prior to construction in the area, or as modified by the Engineer, to allow for drainage of the area.

Curbs and sidewalks shall be removed to the nearest joint scorings. Concrete street panels will be removed from joint to joint, unless otherwise directed by the Department fo Engineering, PWIRS and/or Director of Sewerage. Should a field condition require saw cutting the existing pavement, there will be no direct payment for saw cutting, and all expenses should be included in the applicable bid item for removal and replacement of paving.

Portland Cement Concrete Requirements for roadway pavement and curbs:

- a. Seven (7) sacks of cement per cubic yard
- b. 2 inch to 4 inch slump
- c. The use of Fly Ash in the mix will not be permissible

The pavement shall not be opened to traffic until a compressive strength of 4,000 psi is attained, and in no case shall the pavement be opened to traffic within a three (3) day period after the concrete has been placed.

The final roadway surface finish shall be a "Drag Finish", as defined in the LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition or latest revisions), or as otherwise directed by the Department of Engineering and/or Department of Sewerage.

21.07 <u>CURBS, GUTTERS, AND MISCELLANEOUS:</u>

Replacement of curbs, gutters, walks, dikes, and other like structures shall consist of similar and matching construction to that of adjoining undisturbed structures. Construction shall be at least equal in respects to that of the structures removed in the work and as shown on the standard details. The replacement of items not covered in the bid form shall be handled by Department of Sewerage, or through a separate contract.

21.08 TESTING REQUIREMENTS:

All material and construction testing will be done as directed by the Department of Engineering, and/or Department of Sewerage or as follows:

Asphalt Roadways:

- One base thickness verification per 600 square yards or fraction thereof
- b. One density test on the sub-base (if applicable) and base material per 600 square yards or fraction thereof
- c. One pavement core for the thickness verification per 600 square yards of pavement or fraction thereof

Concrete Roadways:

- a. One slump test minimum per 100 cubic yards (accumulated volume) of concrete or fraction thereof
- b. Four (4) cylinders minimum per 100 cubic yards (accumulated volume) of concrete or fraction thereof
- c. Independent densities, slumps, cylinders, cores, etc. will be required for isolated areas

An initial testing shall be performed by the Parish's testing laboratory and at the Parish's expense. All costs for testing to determine compliance after the initial

test shall be borne by the Contractor and deducted from payments due the Contractor. The total deductions for testing costs to be paid for by the Contractor will be included in the reconciliation of final quantities. Contractor is also responsible for all costs of canceled or re-scheduled tests.

There shall be no adjustment in bid prices for pavement thickness deficiencies. If the concrete core is less than specified, two additional cores on the same slab within a five- foot (5') radius must be taken. If one of these cores is less than specified, then the entire panel (joint to joint) must be removed and additional cores on other adjacent panels within the core range (600 square yards) must be taken and the same procedure followed.

Joint Sealers: All joints in roadway surface shall be cleaned and sealed with approved joint sealant.

21.09 USE OF WIRE MESH:

Wire mesh or rebar shall be used in the replacement of sidewalks, driveways, and roadways, if it existed in the removed sections. The size and type used shall, at a minimum, be equal or better than that removed. There shall be no additional payment for the use of wire mesh.

21.10 <u>CLEANING FOR ACCEPTANCE OF STREET:</u>

Prior to acceptance, the Contractor shall be required to clean up any street as a result of construction activity, as directed by the Director of Sewerage, and/or PWIRS.

TRAFFIC REGULATIONS

22.01 REQUIREMENTS:

A. The Contractor shall be responsible for the development and implementation of a traffic control device plan (TCDP), which will provide for the safe and expeditious movement of traffic through construction zones. A construction zone is defined as the immediate area of actual construction, which interferes with the driving or walking public. The TCDP shall comply with the requirements set forth in the MUTCD), as revised, and with the general requirements stipulated below.

The TCDP for the site shall address the conditions for providing traffic flow within the zone during the influence of construction. The TCDP shall be schematically drawn of sheet(s) large enough to show adequate details and be easily readable and reproducible. If larger than eleven inches by seventeen inches (11" x 17"), the sheet(s) shall be electronically submitted so the Director of Sewerage, PWIRS and Department of Engineering can produce additional copies as needed.

The TCDP shall be designed and stamped by a Professional Engineer registered in the State of Louisiana, who is qualified by education and experience to perform this work to the standards of practice established by the Louisiana State Licensing Board for Professional Engineers and Land Surveyors.

This will involve the following:

<u>Traffic Control through Construction Zones</u>, <u>Urban experience in MUTCD applications</u>, plan preparations, studies in volume, speed, pedestrians, and tort liability.

The Contractor shall submit copies of the TCDP to the Director of Sewerage and Jefferson Parish Traffic Engineering Division's review and approval.

Such approval is <u>required prior</u> to start of any work, which might affect the traffic pattern in the area.

B. Traffic Control

The necessary precautions shall include, but not be limited to, such items as proper construction warning signs, signals, lighting devices, markings, barricades, channelization, and hand signaling devices (flagging operation). The Contractor shall be responsible for installation, maintenance of all devices, and requirements for the duration of the construction period.

All work shall be performed in accordance with LDOTD standard specification, 2000 edition, or latest edition, except as noted. In addition to items shown on the plans, traffic control devices shall be in accordance with the MUTCD.

The Contractor shall be responsible for removal, relocation, or replacement of any traffic control device in the construction area, which exists as part of the normal pre-construction traffic control scheme. Any such actions shall be performed by the Contractor under the supervision, and in accordance with the Specifications, for the Jefferson Parish Traffic Engineering Division, unless otherwise specified.

The Contractor will consult with Director and/or PWRIS, and the Jefferson Parish Traffic Engineering Division immediately on any vehicular or pedestrian safety or efficiency problem incurred as a result of construction of the project. If warranted, the Contractor's Engineer shall make adjustments to the TCDP and the Contractor shall immediately implement the revised TCDP.

The Contractor is responsible for daily monitoring of traffic control devices and must make appropriate changes to correspond to conditions.

A qualified Engineer shall be provided by the Contractor to inspect the job site at the beginning of the project, after significant changes, at 30-day intervals, or more frequently, depending on the duration of the construction activity. A written report submitted to the Contractor, Project PWIRS, Department of Sewerage, and the Jefferson Parish Traffic Engineering Division, verifying compliance with the plan, and adequacy of traffic control devices and operating conditions will be required for each inspection. All deficiencies noted by the report shall be corrected by Contractor.

The reports shall be submitted at the specified times, or liquidated damages will be assessed.

As stated above, Contractor shall be responsible for development of a TCDP whenever normal traffic patterns are altered. Development of a "general" TCDP, which may be used in most residential areas on low volume streets (pending approval of the Department of Sewerage) shall be considered a subsidiary obligation of the Contractor. Traffic Control Device Set Up and Traffic Control Device Operation for implementation of this TCDP shall also be considered a subsidiary obligation of the Contractor.

GENERAL NOTES

(In these notes, the term "ENGINEER" shall mean "QUALIFIED TRAFFIC ENGINEER"

- 1. The design and application of all signals, pavement markings, channelizing devices, and warning signs shall conform to the "Louisiana Manual on Uniform Traffic Control Devices", newest Edition as Revised, and the "Work Area Traffic Control Handbook" of Jefferson Parish.
- 2. Channelizing and delineation devices shall be used to mark all construction areas. These shall be Type II and/or Type III barricades, and/or barrels, all fully reflectorized with lights.
- 3. Any traffic control devices shall be used to mark all construction areas. These shall be Type II and/or Type III barricades, and/or barrels, all fully reflectorized with lights.
- 4. Any temporary devices not applying to an appropriate situation, or that are no longer required, shall be covered, removed, or obliterated by the Contractor.
- 5. The roadway and all traffic control devices shall be restored to original conditions by the Contractor.

- 6. All excavation shall be covered, backfilled, or protected as directed by the Director of Sewerage, PWIRS, fully delineated (See Note 2) at night and when work is not in progress. Excavated pits, etc. shall be fully fenced or barricaded (See Note 2) to prevent access by pedestrians.
- 7. <u>All materials/machines shall be stored outside of the road surface; creating no sight problems, and fully delineated as in Note 2.</u>
- 8. If sections of roadway are totally closed, the Contractor shall notify the Sheriff's Traffic Division, 911 Operations, the Fire Department, and any major traffic generators (i.e. schools, etc.). A three working day, minimum, advanced notice will be required.

- **9.** On totally closed sections of the roadway, the Contractor shall provide access for local traffic only.
- **10**. Barrels used for channelizing and delineation devices as part of this traffic control device plan shall be weighted with sandbags and fully reflectorized, with lights.
- 11. The Contractor shall check traffic control devices on a daily basis as a minimum when beginning and ending the work day, to insure adherence to the plans and proper adequacy of devices for day and night visibility. On weekends, devices shall be checked a minimum once per day.
- The Engineer shall inspect the job site at beginning and end, after significant changes, and at 30-day intervals. A written report shall be submitted to the Engineer and Jefferson Parish Department of Sewerage, verifying compliance with the plan, adequacy of traffic control devices, and operating conditions. All deficiencies noted in the report shall be corrected by the Contractor. The Contractor shall notify the Engineer immediately of any significant changes to the traffic control devices and operating conditions.
- **13.** Flagman and/or Sheriff's control shall be provided as needed and specified by the Engineer.
- 14. At the time of construction, any additional traffic control devices which may be required by the Engineer, PWIRS and/or the Jefferson Parish Department of Sewerage, or the Contractor shall be provided by the Contractor.
- Yellow, high visibility pennant barrier flagging (nylon rope with plastic pennants) shall be strung between Type II barricades and barrels/drums, only as directed by the Engineer.
- The traffic control device plan indicates general traffic control devices to be used on this project. It is anticipated that conditions will vary depending on the phase under construction and that the arrangement of those devices will be reviewed on a day-to-day basis. Should the Contractor have any question as to the arrangement of those devices, the Engineer shall be notified to inspect the site.
- 17. Contractor shall provide for the movement of pedestrians for the entire length of the contract. As much as possible, the Contractor shall not obstruct existing

sidewalks, thereby obstructing pedestrian movements. If existing sidewalks must be obstructed, the Contractor shall provide for the movement of pedestrians by posting appropriate signing, such as, "Sidewalk Closed – Use other Side of Street". Signing shall be reflectorized, and lighted at night. Also, where trenches are excavated outside the roadway surface, the Contractor shall provide each dwelling with at least one accessible crossing of the backfilled trench area, for use by pedestrians.

18. The Contractor shall provide access to area businesses as much as possible. The Jefferson Parish Information Office must receive a road closure at least ten (10) days before the actual closure, unless it is an emergency. Contractor shall work with the Owner's Representative to help fill out the Road Closure Form for submittal to the Public Information Office.

BY-PASS PUMPING

23.01 SCOPE OF WORK:

This section shall include furnishing all equipment, labor, and materials necessary to set-up, operate, and maintain by-pass pumping. The Jefferson Parish Department of Sewerage will determine the quantities and disposition of water to be pumped and the Contractor shall provide the necessary equipment to meet these minimum requirements.

23.02 PLUGGING OR BLOCKING:

It shall be the responsibility of the Contractor to provide and install the required plug and blocking in the line. This plug shall be inserted into the line at a manhole immediately upstream from the section of line being repaired or inspected. The plug shall be so designed that any portion of sewer flow can be released through the line. After all work has been completed, the plug and all blocking shall be removed from the manhole.

23.03 PUMPING AND BY-PASSING:

When pumping/by-passing is required, the Contractor shall supply the necessary pumps, conduits, controls, pipe bends, pipe/hoses, and other equipment required to divert the flow of wastewater around the work site. By-passed sewerage shall be diverted to the system below the work site, not into the storm drainage system. The by-pass system shall be of sufficient capacity to handle existing flows, plus additional flow that may occur during periods of rain, as determined by the Department of Sewerage.

For projects, which are considered to last longer than one normal work day, only submersible or above ground pumps with electric motors will be acceptable without prior approval of the Director of Sewerage. The Contractor shall be responsible for supplying the required electrical feeds, electrical power, labor, and supervision to set up and operate the pumping and by-pass system.

The Contractor must take every precaution to ensure that the plugging and bypassing of sewer flow does not cause flooding or damage to public or private property being served by the sewers involved.

REQUEST FOR PAYMENT

PART 1 - GENERAL

24.01 <u>REQUIREMENTS INCLUDED:</u>

Submit applications for payment to the Department of Sewerage and/or PWIRS, in accordance with the schedule established by Conditions of the Contract.

24.02 FORMAT AND DATA REQUIRED:

- A. Submit payment requests in the form required with itemized data typed on continuation sheets.
- **B.** Provide itemized data on continuation sheet: Format, schedules, line items, and values.

24.03 <u>SUBSTANTIATING DATA FOR PROGRESS PAYMENTS:</u>

- A. All payment requests must be accompanied by a completed Jefferson Parish Certificate of Payment Form and must include a signed affidavit regarding previous payment received, a short progress narrative describing work performed since previous payment submittal.
- **B.** When the Department of Sewerage or PWIRS requires additional substantiating data, the Contractor shall submit suitable information, with a cover letter.
- C. Submit two (2) copies of all data required with a cover letter for each monthly pay request. Any additional substantiating data requested shall also be submitted as required in Part B above.

24.04 PREPARATION OF APPLICATION FOR FINAL PAYMENT:

- A. Fill in application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting.

24.05 <u>SUBMITTAL PROCEDURE:</u>

- A. Submit applications for payment to the Department of Sewerage and PWIRS at the times stipulated in the Agreement
- B. Number: TWO (2) copies of each application
- **C**. When the Department of Sewerage and PWIRS finds application properly completed and correct, they will transmit certificate for payment to Finance, with copy to Contractor.

FIELD INSPECTION REPORTS

25.01 <u>DESCRIPTION:</u>

This work shall consist of the preparation of Field Inspection Report(s) required during various stages of the Contract progression. The Field Inspection Report(s) to be prepared shall be generated through a system compatible with the Peninsular Technologies, LLC PipeTech Software, or Lucity. This work shall be considered incidental to the cost of the associated field work to create and acquire all pertinent data.

25.02 PRE-REHABILITATION SUB-SYSTEM EVALUATION:

A. Within 6 Weeks from completion of the field inspection work, the Contractor shall electronically submit reports (including pipe inventory, physical inspection of manholes, smoke testing, dye-water flooding, and television inspection work). The reports shall include, but not be limited to the following:

For field inspection work:

- 1. An updated pipe inventory obtained from field survey.
- One bound computer generated hard copy report per sub-system evaluated for each type inspection performed pipe inventory (manhole physical inspection, smoke testing, and/or Condition Assessment CCTV inspection)
- 3. Media containing appropriate data and visual inspection results:

Manhole Inspection - Digital JPEG images.

Smoke Testing – Digital JPEG images of leaks.

CCTV Inspection – Digital MPEG video as specified in Section 26.

B. The Contractor shall submit to the Department of Sewerage and PWIRS a complete evaluation report of CCTV television inspection. This report

shall be produced with a system compatible to Lucity TV Inspection Report and data processing equipment specifically designed to record and transfer all information gathered during the CCTV inspection as noted in Section 26.

- C. There will be no additional compensation paid to the Contractor for the first set of inspection reports and digital JPEGs or MPEGs provided to the Department of Sewerage and PWIRS.
- D. All evaluation reports shall also include the following:

<u>Map Changes</u> – Forms noting any field variances from Owner provided work orders and/or maps.

<u>Critical Damage Reports</u> – Forms noting any defects or observations encountered in field inspection activities, which may indicate immediate failure, interruption of service, or sewer overflow may occur.

<u>Cover Letter</u> – A brief narrative describing any major issues identified during field inspection activities.

<u>Glossary</u> – A listing of any Contractor, software, or inspection report specific abbreviations and terminology, which may need to be clarified.

<u>Appendix</u> – Any original field forms used to collect data should be included as appendices.

25.03 POST REHABILITATION REPORT UTILIZING A SYSTEM COMPATIBLE WITH LUCITY:

The following shall be electronically submitted to the Department of Sewerage and PWIRS as noted in Section 26:

- **A**. Pre-rehabilitation and post-rehabilitation video inspections for any CIPP rehabilitated line segments.
- **B.** A computer-generated report detailing each line segment rehabilitated with any restored or CIPP rehabilitated service connection locations noted. Report should be provided with a system compatible to Lucity.
- **C.** A pipe inventory of all line segments included in the post-rehabilitation report.

D. All pertinent data modified by rehabilitation activities, including but not limited to: television inspection, manhole inventory, etc., in a format compatible with Lucity.

25.04 <u>HISTORY:</u>

The Contractor shall be required to prepare an electronic digital version of "activity history records" for all inspection, repair, and rehabilitation efforts performed on this contract. This data upload shall be prepared and transferred using a system compatible with the Lucity Field Work Module.

DATA MANAGEMENT SYSTEM

26.01 GENERAL:

Jefferson Parish utilizes Lucity™ to facilitate the complex task of managing work performed by Parish forces and outside contractors/consultants. Throughout the normal management of the Parish's wastewater collection system, vast amounts of data are collected. The data collection software is Peninsular Technologies' PipeTech® Software Suite.

26.02 DIGITAL VIDEO/AUDIO RECORDING:

- A. Digital Recording: The digital recording shall include both audio and video information that accurately reproduces the original picture and sound of the video inspection. The video portion of the digital recording shall be free of electrical interference and shall produce a clear and stable image. The audio portion shall be sufficiently free of background and electrical noise, so as to produce an oral report that is clear and discernible.
- **B.** Separate MPEG Video files shall be created for each pipe segment inspected. If a reverse setup is required, the individual portions of that pipe segment shall be stored in separate MPEG Video files.
- C. The pipeline inspection shall consist of identifying a location both within the pipe segment (physical location) and within the digital recording (video frame location) for each defect or observation. The use of time codes for defect location shall NOT be deemed equivalent or acceptable. This will allow the digital recording and inspection data to be cross-referenced for instant access to any point of interest within the digital recording.

26.03 DATA STORAGE:

A. Inspection information shall be stored in a relational database management system that employs relationships to increase data integrity and reduce data storage space.

- B. The inspection information shall include the Digital Recording of video and audio, Segment Identification information (Starting MH, Date, Time, etc.), Observation Information (Observation Code, Location, Clock Position, etc.) including a pointer from each observation to the digital recording (Video frame Number), and any accompanying digital still images (JPEG or BMP).
- **C.** All inspection information shall be written to digital media for archival and future review purposes.

26.04 CCTV SOFTWARE:

The Parish utilizes Peninsular Technologies PipeTech Software for field video acquisition and quality control.

- A. Pipe Tech Scan provides for the in-field digital acquisition of sewer video inspection data. Scan captures and compresses video in real time. Defects and observations are entered on an electronic log sheet and cross referenced with the video. Field reports can be generated from Scan.
- **B.** Pipe Tech Check & View provides for the playback of the digital sewer video inspection data and allows for editing prior to placing on a Portable Hard Drive. View allows for viewing of the data once scanned and edited. Scenes can be skipped and final reports can be generated from View.

26.05 <u>Infrastructure Management Software</u>:

To facilitate the efforts by the Parish to manage its wastewater infrastructure needs, the Contractor shall be required to utilize a system that is compatible with the Lucity Wastewater Collection Management System to electronically store and analyze field data from video inspection and sewer rehabilitation tasks. The Contractor shall provide to the Parish field upload of the most recently completed work at the owner's request. The acquisition of this software and license shall be the responsibility of the contractor.

CONTRACT CLOSEOUT

PART 1 - GENERAL

27.01 REQUIREMENTS INCLUDED:

Comply with requirements stated in Conditions of the Contract and in specification for administrative procedures in closing out the work

27.02 FINAL ADJUSTMENT OF ACCOUNTS:

- A. Submit a final statement of accounting to the Engineer
- B. Statement shall reflect all adjustments to the Contract Sum:
 - 1. The original Contract Sum
 - 2. Additions and deductions resulting from:
 - a. Previous Cap Changes
 - b. Other adjustments
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments
 - 5. Sum remaining due

27.03 <u>FINAL APPLICATION FOR PAYMENT:</u>

Contractor shall submit the final application for payment in accordance with procedures and requirements stated in the conditions of the contract.

27.04 <u>CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER:</u>

A. Project Record Documents, Videos, Work Orders, and other required documentation.

- B. Warranties and Bonds
- **C.** Evidence of Payment and Release of liens: Requirement of General and Supplementary Conditions
- D. Certificate of Insurance for Products and Completed Operations

SPECIAL PROJECT PROCEDURES

28.01 PROJECT MEETINGS:

- A. Director of Sewerage and/or PWIRS shall schedule and administer the preconstruction meeting, periodic progress meetings, and specifically called meetings throughout progress of the work. Representatives of contractors, sub-contractors, and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.
- B. Director of Sewerage and/or PWIRS shall schedule a pre-construction meeting prior to the beginning of construction. The pre-construction meeting shall be held at a central site, convenient for all parties, designated by the Director of Sewerage and/or PWIRS. Attendance at the pre-construction meeting shall include a Jefferson Parish Department of Sewerage representative, PWIRS, Resident Project Representative, and Contractor's superintendent. The pre-construction meeting shall consist of at least the following items:
 - Designation of responsible personnel
 - 2. Submittals
 - 3. Requests for Payment
 - 4. Procedures for maintaining Record Documents

28.02 <u>HOUSE CONNECTION REPLACEMENT PRIOR TO CIPP:</u>

For deteriorated or damaged connections, or ones, which are protruding and cannot be cut internally, the Contractor will excavate and make the repair prior to installation of the CIPP.

28.03 HAZARDOUS LOCATIONS:

A. The existing manholes or other confined spaces may be hazardous, in that explosive concentrations of sewage gas and/or deficient oxygen levels may be present. A direct reading combustible gas indicator and oxygen meter will be utilized to establish explosive gas concentrations and oxygen levels prior to entry. Oxygen levels between 19.5% and 21.4%, and Lower Explosive Limit (LEL) levels below 10% will be required for entry without personnel protection

equipment. Readings for hydrogen sulfide levels will be obtained prior to entry. Entry without personnel protection equipment will be allowed for hydrogen sulfide concentrations below concentrations of 10 parts per million (ppm). All personnel entry in these areas shall be in strict accordance with OSHA standards for confined space entry, including, but not limited to Code of Federal Regulation 1910.146.

B. The contractor shall also instruct and prohibit his employees and the employees of his sub-contractors from smoking while in the hazardous areas. Suitable prominent "No Smoking" signs shall be placed at locations indicated by the Engineer.

TECHNICAL SPECIFICATIONS

SECTION 29

SANITARY SEWERAGE FORCE MAIN HORIZONTAL DIRECTIONAL DRILLING

29.01 **GENERAL**:

The contractor shall provide all labor, equipment, and materials to install force mains using high density polyethylene (HDPE) for the collection of sanitary sewage from lift stations, or other locations, as requested.

29.02 SUBMITTALS:

- A. The contractor will submit complete project data from vendor on all products proposed for use in the project.
- B. Results from recording of each fuse on HDPE pipe will be submitted to the Owner as part of the installation record.
- C. Contractor will submit a proposed method for pigging or cleaning lines for approval by the Owner after installation.
- D. Contractor shall provide proof of qualification for all labor involved in fusing of HDPE pipe. Proof of qualification shall be written confirmation of training by a manufacturer involved in the manufacture of HDPE pipe. Only individuals with such qualifications will be allowed to perform fusing operations.
- E. Contractor shall submit proposed pressure testing methodology for review by the owner prior to initiating any final pressure testing of pipe.

29.03 MATERIALS:

This section of the specification details the requirements for pressurized sanitary sewer force mains and related accessories. Force mains will be constructed of high density polyethylene pipe (HDPE) meeting the requirements in this section.

A. **High Density Polyethylene Pipe:** Contractor will furnish High Density Polyethylene Pipe and Fitting conforming to ANSI AWWA Standard C 906-90 and ASTM D 3350. The pipe shall be rated for a pressure of 100 psi or more. The pipe shall be provided in ductile iron pipe sizes. The pipe shall be produced by Rinker, J-M PE Corporation, or approved equal. The manufacturer shall have an ISO 9001 listing covering HDPE manufacturing facility, as well as the corporate office. Jefferson Parish may require quality audits, at no additional cost.

- (1) Quality and Inspection: All pipe shall be smooth on both the interior and exterior surfaces; be free of noticeable imperfections such as cracks, blisters, or kinks in the pipe. Jefferson Parish shall be able to inspect the pipe at the pipe plant and other various storage sites. Field repair of any damaged piping shall not be permitted. Jefferson Parish reserves the right to require the removal of fused connections for destructive testing to verify the integrity of fused joints, etc.
- (2) Experience of Manufacturer: The pipe manufacturer shall provide evidence, at request of owner, of having provided quality pipe and joints that have shown satisfactory results in service. Evidence of completion of projects of similar size and timing for HDPE pipe will also be provided upon request. All pipe within any given work order shall be from the same manufacturer.

- (3) Markings: Marking shall be legible during usual handling of the pipe and be applied in a manner that will not damage the pipe. The following markings shall be provided as shown below:
 - a. Nominal size and OD base.
 - b. Standard material code designation.
 - c. Dimension ratio.
 - d. Pressure class.
 - e. AWWA designation for this standard.
 - f. Manufacturer's production code.
 - g. Material test category of pipe.
 - h. NSF 61 approved.
- B. Location Wire & Detector Tape: The contractor will supply all location wire. Locating wire shall be 8 gage, coated wire.
- C. Vacuum Breaker / Air Relief Valve: A combination air relief and vacuum breaker valve shall be installed at high points and grade changes within the force main piping. The valve shall be as manufactured by GA Industries, or approved equal. The valve shall be mounted in the vertical position at the top of the pipeline, with an insolation below each valve to allow for maintenance of the valve. The valve shall be installed in a vault or manhole which has adequate drainage and venting.

29.04 IMPLEMENTATION:

- A. **Unloading:** Equipment and facilities for unloading, hauling, distributing, and storing materials shall be furnished by the Contractor and shall at all times be available for use in unloading materials.
- B. **Handling:** Pipe and other materials shall be carefully handled, so as to prevent breaking and/or damage. Pipe may be unloaded individually by hand, but shall not be unloaded by rolling or dropping off of trucks. Preferred unloading is in units using mechanical equipment, such as forklifts, cherry pickers, or front end loaders with forks.
- C. Distributing: Materials shall be distributed and placed so as to least interfere with traffic. No street or roadway may be closed without first obtaining permission from the proper authorities. The Contractor shall furnish and maintain proper warning signs and obstruction lights for protection of traffic along highways, streets, and roadways upon which material is disturbed. No distributed material shall be placed in drainage ditches.
- D. **Joining Methods for HDPE Pipe:** The pipe and any fitting shall be joined by butt or saddle fusion, mechanical joint adapters, or by flange connections, in accordance with manufacturer's recommendations.
- E. Fusion: The pipe shall be joined by shear fusion of the ends. Prior to fusion, the pipe shall be clean and the ends shall be cut square. Fusion system operators shall be trained in the use of the equipment by the pipe supplier or manufacturer of the fusing machine, and must be experienced in the operation of the equipment. All fuses shall be recorded, the recording of the information must be provided to Jefferson Parish, and the recorded information must meet the standard requirements of the pipe manufacturer. All fusions failing to meet these requirements shall be removed and refused.

- F. Installing of Location Wire and Detector Tape: Contractor shall be required to install locator wire along the entire section of pipeline. The locator wire shall be installed simultaneously with the polyethylene piping. Wire shall be properly spliced at each end connection. Care should be taken to adequately wrap and protect wire at all splice locations. No bare wire will be accepted. There will be no additional pay item for this work; it should be included in the Unit price for installing polyethylene pipelines.
- G. **Cold (Field) Bending:** Contractor shall not bend the pipe to fit a trench more than that allowed by the pipe manufacturer.
- H. Protection of Pipe Openings: During installation, the Contractor will ensure that pipe ends that have not been used will be protected against dirt, debris, animals, and other foreign materials. Plastic caps held in place, or other methods recommended by the manufacturer shall be used.
- Cleaning: Before acceptance of any line, the line must be cleaned. Should the Contractor fail to close the pipe, or debris is found in the line, the Contractor shall clean the line by pigging or other suitable means, at the Contractor's expense.
- J. **Testing:** Testing of HDPE pipe installation will include destructive testing as well as final pressure testing to ensure no leaks are present in the line.
 - The testing of the HDPE pipe will be performed in accordance with AWWA and the manufacturer's recommendations. Contractor will submit a test protocol to Jefferson Parish for approval, prior to implementing any testing.

UPSTREAM MANHOLE:		ADDRE	SS:			BANK:			
QUALIFIER:	QUALIFIER:								
DOWNSTREAM MANHOLE:	OOWNSTREAM MANHOLE: ADDRESS:								
QUALIFIER:									
DATE://									
NSPECTION CREW	/ DIRECTION								
WEATHERLOCATION	1-DRY 2-WET 3-RAIN 4-DAY AFTER RAIN 11-PRIVATE LINE 2-STREET ROW HVY TRFC 3-STREET ROW LGT TRFC 4-EASEMENT PR ACCESS 5-EASEMENT GD ACCESS 6-PRKG LOT GD ACCESS 7-PRKG LOT GD ACCESS 8-ALLEY PR ACCESS								
DYED TEST	9-ALLEY		PEN AREA PE	RACCESS	11-OPEN /	AREA GD ACCESS			
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TELEVISION INSPECTION FORM

INSPECTION CREW:					DATE:			_	JOB NO:	
UPSTR	UPSTREAM MANHOLE:				ADDRE	ESS:	BANK:			
9	QUALIFIER:									
DOWNS	STREAM MAN	HOLE:			ADDRE	:ee.				
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	ADDITIONAL OBSERVATIONS									
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PAGE ____ OF ____

SEWER REHAB SECTION CRITICAL DAMAGE REPORT

DATE:	_		LIFT	STATION AREA:
M/H FROM:	M/H TO:	M/H LOCATO	N:	
PIPE SIZE:	TOTAL LENGTH:	PIPE TYPE:	DEPTH:	OPERATOR:
	LOCATION:			
CRITICAL DAMAGE	FOOTAGE:	FROM UPS	DWN	CLOCK POSITION:
SURFACE COVER O	VER PROBLEM:		SURFACE COVER	MARKED: YES NO
ROUGH SKETCH:				
UPS M/H:				DWN M/H:
PROBLEMS/COMM	MENTS:			
RECEIVED BY:			DATE REPAIR	R COMPLETED:

INVITATION TO BID THIS IS NOT AN ORDER

DATE: 11/18/2020

BID NO.: 50-00132469

JEFFERSON PARISH

PURCHASING DEPARTMENT P.O. BOX 9 GRETNA, LA. 70054-0009 504-364-2678

BUYER: DNelson@jeffparish.net

Page:

BIDS WILL BE RECEIVED ONLINE VIA <u>WWW.JEFFPARISHBIDS.NET</u> UNTIL 2:00 PM, 01/05/2021 AND PUBLICLY OPENED THEREAFTER IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053 AND VIA TELECONFERENCE (DIAL-IN AT (504) 323-1800, (MEETING ID: 181357) At no charge, bidders are to submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION. HOWEVER, ELECTRONIC SIGNATURES AS DEFINED IN LSA - R.S. 9:2602(8) ARE ACCEPTABLE. SIGNATURE MUST BE A SECURED DIGITAL SIGNATURE.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647 as amended.

Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission, warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from http://purchasing.jeffparish.net and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing via email to the buyer's email address as indicated above, no later than Five (5) working days prior to the bid opening. Bid numbers should be mentioned in all requests. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

DATE: 11/18/2020

BID NO.:50-00132469 Page: 2

All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website http://purchasing.jeffparish.net or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website http://purchasing.jeffparish.net or you may provide your own document.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

A. AWARD OF CONTRACT: JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

PREFERENCE: Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA – R.S. 38:2251-2261"

- B. USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.
- C. CANCELLATION OF CONTRACT: JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and, unless otherwise specified, shall be exclusive of state and local taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

DATE: 11/18/2020

BID NO.: 50-00132469

NCTRUCTIONS FOR RIPREDS AND OFFICER ALL CONDITIONS

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INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online.

This is a secure site and authorized personnel have limited read access only. Bidders are to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at http://purchasing.jeffparish.net.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 as amended. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at http://purchasing.jeffparish.net and clicking on Online Forms.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW.

1,3,4,6,7,10,11,12,13,14,17

PRE-BID BID CONFERENCE WILL BE HELD IN THE JEFFERSON PARISH PURCHASING DEPARTMENT, 200 DERBIGNY ST., SUITE 4400, GRETNA, LA 70053 AT 10:00 AM ON 12/07/2020

- All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
- Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of
 responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection
 does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to
 complete the work in accordance with the specification with no additional cost to the owner.
- 3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.
- 4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid electronic envelope. Failure to comply will cause the bid to be rejected. When submitting the bid electronically, the license number must be entered in the appropriate field in the electronic procurement system. Failure to comply will cause the bid to be rejected.
- 5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.

DATE: 11/18/2020 BID NO.: 50-00132469

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.

- 7. PUBLIC WORKS BIDS: All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
- 8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
- NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price
 unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
- 10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Failure to comply with this instruction will result in bid rejection.
- 11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. All sureties must be in original format (no copies) When submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
- 12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
- 13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
- 14. PUBLIC WORKS BIDS Completed, Signed and Properly Notarized Affidavits Required; This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
- 15. NON-PUBLIC WORK BIDS Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON-PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
- 16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.
- 17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session Louisiana Revised Statute 47:301(8)(c). Owner will furnish to contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Owner the amount of taxes not incurred.

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission: and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19). By signing this document, every corporation, partnership, or person contracting with PARISH, whether by cooperative endeavor, intergovernmental agreement, bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program, attests that it understands and will abide by all provisions of JPCO 2-155.10.

Page:

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TO:	JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053	BID FOR:	(LINING) OF E SEWERS, INC	OR PREVENTATIVE MAINT XISTING SANITARY & LUDING SERVICE LATER LOCATIONS IN J.P.
to pe accor	undersigned bidder hereby declares and represents that she/he; a) has eccived, relied on, or based his bid on any verbal instructions contrar seted and is familiar with the project site, and hereby proposes to prove form, in a workmanlike manner, all work and services for the constructions with the Bidding Documents prepared by: Let to provide name of entity preparing bidding documents.	y to the Bidding I vide all labor, mat ruction and compl	Documents or any rerials, tools, applied to the reference of the reference	addenda, c) has personally ances and facilities as required nced project, all in strict
TOT	ers must acknowledge all addenda. The Bidder acknowledges receip ned to each of the addenda that the Bidder is acknowledging) AL BASE BID: For all work required by the Bidding Documents (intes) the sum of:			
	Control of the control of the		D-11	(f) \
-			Dollars	(\$)
ALTI altern	ERNATES: For any and all work required by the Bidding Document ates in the unit price description.	its for Alternates	ncluding any and	all unit prices designated as
Alter	nate No. 1 (Owner to provide description of alternate and state whetl	her add or deduct	for the lump sum	of:
	N/A			
Alteri	nate No. 2 (Owner to provide description of alternate and state whet	her add or deduct) for the lump sum	ı of:
	N/A		Dollars	(\$)
Alterr	nate No. 3 (Owner to provide description of alternate and state wheth ${ m N/A}$			
	1/11		Dollars	(\$)
NAMI	E OF BIDDER:			
ADDR	RESS OF BIDDER:			
	SIANA CONTRACTOR'S LICENSE NUMBER:			
	E OF AUTHORIZED SIGNATORY OF BIDDER:			
	E OF AUTHORIZED SIGNATORY OF BIDDER:			
	ATURE OF AUTHORIZED SIGNATORY OF BIDDER **:			
	1			
THE F	OLLOWING ITEMS ARE TO BE INCLUDED WITH THE SU	BMISSION OF	THIS LOUISIA	NA.

- * The <u>Unit Price Form</u> shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.
- ** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA-R.S. 38:2218 (B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA-R.S. 38:2218.(A) is attached to and made a part of this bid.

Bid# 50-00132469

JEFFERSON PARISH

PURCHASING DEPT
200 DERBIGNY ST. SUITE 4400
GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DECODIDE	X Base Bid	0001 - Clean 8 Ir	nch or 10 Inch S	anitary or Storm Sewer
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
1	20,000.00	LF		
	X Base Bid	0002 - Cloan 12 I	ingh Course Conit	ary or Storm Sewer
DESCRIPTION:		0002 Clean 12 1	men bewer banne	ary or storm sewer
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
2	900.00	LF		
	X Base Bid			
DESCRIPTION:	Alt.#	0003 - Clean 15 1	nen and 18 Inch	Sewer Sanitary or Storm Sewer
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
3	1,000.00	LF		
	X Base Bid			
DESCRIPTION:		0004 - Clean 21 I	nch and 24 Inch	Sewer Sanitary or Storm Sewer
REF NO.	QUANTITY	UNIT OF MEASURE	IIIII PRIOT	
4	500.00	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
4	300.00	LF		
DESCRIPTION:	X Base Bid	0005 - Clean 27 I	nch and 30 Inch	Sewer Sanitary or Storm Sewer
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
5	500.00	LF		
	X Base Bid	0006 - Clean 36 I	nch Sewer Sanita	ary or Storm Sewer
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
6	100.00	LF		
			•	
	X Base Bid	0007 - Internal Cl	eaning From Main	nline or Cleanout Access Point
DESCRIPTION:	Alt.#	0007 - Daterar Cr	eaning From Main	niine or Cleanout Access Point
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
7	5.00	EA	GRITTRIGE	ONLY PROCEENTED ON (Quantity times office)
			1	
	V Page Pin			
DESCRIPTION:	X Base Bid	0008 - Lateral In	spection From Cl	leanout/Access Point
	Alt.#			
REF NO.				
8	QUANTITY 5.00	UNIT OF MEASURE EA	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT
200 DERBIGNY ST. SUITE 4400
GRETNA, LA 70053 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION: X Base Bid 0009 - Lateral Inspection From Mainline-Launching				ainline-Launching
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
9	5.00	EA		
DESCRIPTION:	X Base Bid	0010 - Setup for	Lateral Cleanin	g
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
10	5.00	EA		
			1	
DESCRIPTION:	X Base Bid	0011 - Setup for	Lateral Inspect	ion
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
11	5.00	EA		
DESCRIPTION:	X Base Bid	0012 - Combinatio	n Vacuum/Cleani	ng Truck
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
12	25.00	HR		
DESCRIPTION:	X Base Bid Alt.# QUANTITY	0013 - Clean 42 I		
		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
13	100.00	LF		
DESCRIPTION:	X Base Bid	0014 - Clean 48 I	nch Storm Sewer	
REF NO.	QUANTITY QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
14	100.00	LF	ONTTRICE	ONIT PRIOR EXTENSION (Quantity times offic Price)
e- 5			I	· · · · · · · · · · · · · · · · · · ·
DESCRIPTION:	X Base Bid	0015 - Clean 54 I	nch Storm Sewer	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
15	100.00	LF		
DESCRIPTION:	X Base Bid Alt.#	0016 - Clean 60 In	nch Storm Sewer	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
16	100.00	LF		

Bid# 50-00132469

CONTRACT FOR PREVENTATIVE MAINTENANCE

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053

(LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SUITE 4400

SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bid	0017 - Root Remov	al 8 Inch Pipe	
DESCRIPTION:	Alt.#	TOOL ROMOV	ar o men ripe	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
17	1,000.00	LF		
	X Base Bid		-	
DESCRIPTION:	Alt.#	0018 - Root Remov	al 10 Inch Pipe	
REF NO.	QUANTITY	UNIT OF MEASURE	T	
18	25 2000 2000	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
10	200.00	LF		
DESCRIPTION.	X Base Bid	0019 - Root Remov	al 12 Inch Pipe	
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
19	500.00	LF		
	•		•	
	X Base Bid	0020 Boot Bores	al 15 Tark Diag	mbour OA Tarak Pierr
DESCRIPTION:	Alt.#	0020 - ROOL Remov	al 15 Inch Pipe	Thru 24 Inch Pipe
REF NO.	QUANTITY	UNIT OF MEASURE	LIMIT DRICE	LIBIT PRIOF EXTENSION (O (V. d II. V. P. l)
20	100.00	LF	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
20	100.00	LF		
DESCRIPTION:	X Base Bid	0021 - Video Insp	ection/Radial V	iew Camera in 8 Inch Thru 12 Inch Pipe
BECOMI HOM:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
21	1,000.00	LF		
	X Base Bid	0022 - Video Inspe	ection/Radial C	amera in 15 Inch Thru 21 Inch Pipe
DESCRIPTION:	Alt.#	2 3 1 (-22-6	2 1 1 2 2 2 2 4 1 1 2 2 2 2 2 2 2 2 2 2	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
22	2,000.00	LF		
			1	
	X Base Bid			
DESCRIPTION:		0023 - Video Insp	ection/Radial C	amera in 24 Inch Thru 60 Inch Pipe
DEF.NO.	Alt.#		I	
REF NO.		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
23	900.00	LF		
DESCRIPTION	X Base Bid	0024 - Additional	Setup for TV I	nspection 6 Inch Thru 12 Inch
DESCRIPTION:	Alt.#	Pipe		⁵⁰⁰
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
24	10.00	EA		

Bid# 50-00132469

TO: JEFFERSON PARISH
PURCHASING DEPT
200 DERBIGNY ST. SUITE 4400
GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bio	d 0025 - Additional	Set up for TV	Inspection 15 Inch Thru 36 Inch
DESCRIPTION: Alt.#_ Pipe			inspection is then thru so then	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
25	10.00	EA		
,		•		· · · · · · · · · · · · · · · · · · ·
	X Base Bio	d 0026 - Insertion	of 4 5MM CIPP I	n & Inch Pine
DESCRIPTION:	Alt.#_			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
26	1,000.00	LF		
	X Base Bid	d 0027 - Insertion	of 4.5MM CIPP i	n 8 Inch Vitrified Clay Pipe
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
27	2,000.00	LF		
	X Base Bid	0028 - Insertion	of 6.0MM CIPP i	n 8 Inch Pipe
DESCRIPTION:	Alt.#			to an analysistem of the terms
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
28	20,000.00	LF		
	X Base Bid	0029 - Insertion	of 6.0MM CIPP in	n 10 Inch Pipe
DESCRIPTION:	Alt.#			1
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
29	900.00	LF		
	8			
	X Base Bid	0030 - Insertion	of 6.0MM CIPP in	n 12 Inch Pipe
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
30	1,000.00	LF .		
	X Base Bid	0031 - Insertion	of 6.0MM CIPP in	n 15 Inch Pipe
DESCRIPTION:	Alt.#			<u>-</u>
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
31	2,000.00	LF		
DECODERTIC:	X Base Bid	0032 - Insertion o	of 6.0MM CIPP in	n 18 Inch Pipe
DESCRIPTION:	Alt.#			110
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
32	500.00	LF		

Bid# 50-00132469

CONTRACT FOR PREVENTATIVE MAINTENANCE

(LINING) OF EXISTING SANITARY & STORM

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400

SEWERS, INCLUDING SERVICE LATERALS AT GRETNA, LA 70053 SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	V D D' 1		*	
DESCRIPTION:	X Base Bid	0033 - Insertion	of 7.5MM CIPP i	n 21 Inch Pipe
DECORA HOR.	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
33	600.00	LF		
DESCRIPTION.	X Base Bid	0034 - Insertion	of 9.0MM CIPP i	n 24 Inch Pipe
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
34	600.00	LF		
	000.00			
	X Base Bid	0035 - Insertion	of 9.0MM CIPP i	n 27 Inch Pipe
DESCRIPTION:	Alt.#			00 00 1 10000000000 Tabul
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
35	600.00	LF	ONTTROL	ONIT PRIOR EXTENSION (Quantity times ont Price)
	000.00	LF		
	X Base Bid	0036 - Insertion	of 10.5MM CTPP	in 30 Inch Pine
DESCRIPTION:	Alt.#		or ro.simi ciri	in 50 men ripe
REF NO.	QUANTITY	UNIT OF MEASURE		
		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
36	650.00	LF		
	X Base Bid	0037 - Insertion	of 12 OMM CIDD	in 26 Inch Dine
DESCRIPTION:	Alt.#	0037 - Insercion o	JI 12.0MM CIPP	in 36 inch Pipe
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
37	500.00	LF		
	X Base Bid	0039 Ingerties	of 12 FMM GIDD	in 42 Tark Bins
DESCRIPTION:		0038 - Insertion o	DI 13.5MM CIPP	in 42 inch Pipe
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
38	300.00	LF		
	X Base Bid	2020 7	5 15 0101 0555	
DESCRIPTION:		0039 - Insertion	of 15.0MM CIPP	in 48 Inch Pipe
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
39	300.00	LF		
	V Bage Bid	2010		
DESCRIPTION:	X Base Bid	0040 - Insertion o	of 16.5MM CIPP	in 54 in 54 Inch Pipe
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
40	300.00	LF		

Bid# 50-00132469

JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	TION: X Base Bid 0041 - Insertion of 18.0MM CIPP in 60 Inch Pipe			in 60 Inch Pipe		
	Alt.#		UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit Price)			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
41	20.00	EA				
DESCRIPTION:	X Base Bid	0042 - Additional	1.5MM Thickness	s for 8 Inch and 10 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
42	5,000.00	LF				
DESCRIPTION:	X Base Bid	0043 - Additional	1.5MM Thickness	s for 12 Inch and 15 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
43	1,000.00	LF				
DESCRIPTION:	X Base Bid Alt.#	0044 - Additional	1.5MM Thickness	for 18 Inch and 21 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
44	1,000.00	LF				
				ř.		
DESCRIPTION:	X Base Bid	0045 - Additional	1.5MM Thickness	for 24 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
45	1,000.00	LF				
	·					
DESCRIPTION:	X Base Bid	0046 - Additional	1.5MM Thickness	for 27 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
46	1,000.00	LF				
DESCRIPTION:	X Base Bid	0047 - Additional	1.5MM Thickness	for 30 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
47	1,000.00	LF				
DESCRIPTION:	X Base Bid Alt.#_	0048 - Additional	1.5MM Thickness	for 36 Inch CIPP		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
48	400.00	LF				

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P. I

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

MATERIAL CONTRACTOR OF CONTRACTOR		*				
DESCRIPTION	X Base Bid	0049 - Additional	1.5MM Thickness	for 42 Inch	CIPP	
DESCRIPTION:	Alt.#_					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
49	100.00	LF				
	100.00	L)				
Native and State of the State o	-					
	X Base Bid	0050 - Additional	1.5MM Thickness	for 48 Inch	CIPP	
DESCRIPTION:	Alt.#_					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
50	100.00	LF				
0.00 + 11.0						
ENGLISH NAVISTANDE ME	[F]	-				
DESCRIPTION:	X Base Bid	0051 - Additional	1.5MM Thickness	for 54 Inch	CIPP	
DEGOIGH HOIA.	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
51	100.00	LF				
	X Base Bid					
DESCRIPTION:	H	0052 - Additional	1.5MM Thickness	for 60 Inch	CIPP	
	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
52	100.00	LF				
	X Base Bid	0050 7 1 1 5		63		
DESCRIPTION:	 	0053 - Lateral Red	construction From	m Cleanout by	CIPP	
	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
53	25.00	EA				
	X Base Bid	0054 - Extension o	of Lateral Pegon	struction Fro	m Cleanout	
DESCRIPTION:	Alt.#	by CIPP	DI Daterai Recon	scruccion rio	on Cleanouc	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT DELOC EXTENSION (O	
	2 1000		UNITPRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
54	100.00	LF				
	X Base Bid	0055 - Setup for I	Long Segment Lat	eral Reconstr	ruction From Mainline CIPP	
DESCRIPTION:	X Base Bid 0055 - Setup for Long Segment Lateral Reconstruction From Mainline CIPP Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	A TUNE REPORT	UNIT PRICE EXTENSION (Quantity times Unit Price)	
55	50.00	EA	Emiliaring Paragraphic and Property of	CONTRACTOR OF BUILDING MACHINE	out the contract of the contra	
	30.00	- / 1				
DESCRIPTION:	X Base Bid	0056 - Long Segmen	t Lateral Recons	struction Fro	m Mainline by CIPP	
DESCRIPTION:	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)	
56	100.00	EA				

Bid# 50-00132469

JEFFERSON PARISH PURCHASING DEPT TO: 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:		Base Bid 0057 - Extension of Long Segment Lateral Reconstruction From Mainline by CIPP Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
57	100.00	LF			
DESCRIPTION:	X Base Bid	0058 - Setup for	Short Segment La	ateral CIPP Lateral Connection Reconstruction	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
58	30.00	EA			
	-				
DESCRIPTION:	X Base Bid	0059 - Short Segm	ent Lateral Conr	nection Reconstruction From Mainline by CIPP	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
59	30.00	EA			
DESCRIPTION:	X Base Bid	0060 - Service Re 0 Foot-6 Foot De		eplacement by Excavation	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
60	5.00	EA			
				'	
DESCRIPTION:	X Base Bid	0061 - Service Reconstruction/ Replacement by Excavation 6 Foot-10 Foot Deep			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
61	5.00	EA			
DESCRIPTION:	X Base Bid Alt.#	0062 - Service Red or Greater	construction/ Re	eplacement by Excavation 10 Foot	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
62	5.00	EA			
DESCRIPTION:	N: Base Bid 0063 - Repair/Adjust Cleanout				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
63	5.00	EA			
DESCRIPTION:	X Base Bid	0064 - Installatio	on of Sewer Clea	nout Type 1	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
64	7.00	EA			

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	[17] p					
DESCRIPTION:	X Base Bid	0065 - Replace Se	ction of Servic	ce Line		
BEGGIAN HOIA.	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
65	124.00	EA				
	X Base Bid					
DESCRIPTION:		0066 - Restore 8	Inch - 10 Inch	Main by Point Repair (0 Foot - 8 Foot Deep)		
	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
66	200.00	EA				
	X Base Bid	0067 - Restore 8	Inch - 10 Inch	Main by Point Repair (8 Foot - 12 Foot Deep)		
DESCRIPTION:	Alt.#	NODOSIC S	1000	nain by rothe Repair (6 root 12 root beep)		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
67	10.00	EA	ONTIFICE	ONIT PRIOE EXTENSION (Quantity times offit Price)		
	10.00	LA				
	F-1	***				
DESCRIPTION:	X Base Bid	0068 - Restore 8	Inch - 10 Inch	Main by Point Repair (Beyond 12 Foot Deep)		
DESCRIPTION:	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
68	2.00	EA				
	X Base Bid	0060 0	- 1	Market Branch Bollow Bollow		
DESCRIPTION:	To the negation of the state of the negation o					
D== 1/0						
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
69	100.00	LF				
	X Base Bid	0070 - Restore 6	Inch - 10 Inch I	Main Beyond Point Repair		
DESCRIPTION:	Alt.#	(8 Foot - 12 Foot		•		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
70	64.00	LF		· ·		
	V Dog - D/ 1	·				
DESCRIPTION:	X Base Bid			Main Beyond Point Repair		
	Alt.#	(Beyond 12 Foot De	eep)			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
71	10.00	LF				
	X Base Bid	0072 - Repoint Exi	isting Sewer Mar	nholes or Wetwells		
DESCRIPTION:	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
72	2,000.00	SQFT	0	One i rior Extension (quantity times offit Frice)		

Bid# 50-00132469

JEFFERSON PARISH TO: PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	X Base Bid 0073 - Chemical Grout to Fill Voids and Stop Leaks in Structures			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
73	100.00		OIII I I III OL	ONT FRIED EXTENSION (Quality times office)
		0.2	<u> </u>	
	[F7			
DESCRIPTION:	X Base Bid	d 0074 - Sewer Manh	ole/Wetwell Reh	ab by Cementitous Lining Method
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
74	1,000.00	BG		
DESCRIPTION:	X Base Bid	d 0075 - Sewer Manh	ole/Wetwell Reh	ab by Epoxy Lining Method
REF NO.	QUANTITY	UNIT OF MEASURE	I IIII PRIOS	
75	1,000.00		UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
15	1,000.00	SQFT		
			-	
DESCRIPTION:	X Base Bid	l 0076 - Manhole Co	ver Adjustments	
DESCRIPTION.	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
76	11.00	EA		
	X Base Bid	0077 - Rebuilding	Manhole Bench/	Invert
DESCRIPTION:	Alt.#	3	,	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
77	10.00	EA		
	X Base Bid	0070 Demosts and	Dania - Maria - 1	
DESCRIPTION:	Alt.#	0078 - Remove and	Replace Mannole	e Cone
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
78	11.00	EA	ONIT PRICE	ONLY PRICE EXTENSION (Quantity times unit Price)
70	11.00	LA		
	TT			
DESCRIPTION:	X Base Bid	0079 - Remove and	Replace Manhole	e Wall
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
79	10.00	VF		
DEGODIETIO:	X Base Bid	0080 - Repair Manh	nole Line Connec	etion
DESCRIPTION:	Alt.#	-		4
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
80	20.00	EA		

Bid# 50-00132469

JEFFERSON PARISH TO: PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	ION: Alt.# Base Bid 0081 - Replace Manhole Cover and Casting				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
81	10.00	EA	O'M' I MOL	CHITTIGE EXTENSION (quantity times sint rise)	
	10.00	L/\	L		
	lea .				
DESCRIPTION:	X Base Bid Alt.#	0082 - Install Fo	rce Main Discha	rge Turndown	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
82	10.00	EA			
	X Base Bid				
DESCRIPTION:		0083 - Remote Cut	and Brush Serv	ices	
DEENO	QUANTITY		1		
REF NO.		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
83	1,000.00	EA			
	X Base Bid	0084 - Internally	Trim Protrudin	g Service Connections	
DESCRIPTION:	Alt.#_				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
84	500.00	EA			
37.16	X Base Bid				
DESCRIPTION:					
	QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE UNIT PRICE EXTENSION (Quantity times Unit Price)				
REF NO.	2 CONTROL OF THE PROPERTY OF T	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
85	16.00	EA			
	X Base Bid	0086 - Set Up 8 Ir	nch Bypass Pump		
DESCRIPTION:					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
86	5.00	EA			
	X Base Bid	0000 0 1 17 10			
DESCRIPTION:		0087 - Set Up 10 :	incu sypass Pum	ħ	
BEENIO	Alt.#	LIMIT OF MEADURE			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
87	2.00	EA			
	_				
DECODIESTIC:	X Base Bid	0088 - Set Up 12 I	Inch Bypass Pum	9	
DESCRIPTION:	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
88	1.00	EA			

Bid# 50-00132469

JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P. I

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	X Base Bid	0089 - Operation	of 3 Inch Bypass	Pump		
	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
89	24.00	HR				
DESCRIPTION:	X Base Bid Alt.#	operation of a mon sypass ramp				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
90	1.00	WK				
	<u> </u>		·			
DESCRIPTION:	X Base Bid	0091 - Operation o	of 3 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
91 '	1.00	MO				
DESCRIPTION:	X Base Bid Alt.#_	0092 - Operation o	of 4 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
92	48.00	HR		a a		
DESCRIPTION:	X Base Bid Alt.#_	0093 - Operation o	of 4 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
93	1.00	WK				
	6	6	•			
DESCRIPTION:	X Base Bid Alt.#	0094 - Operation o	of 4 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
94	1.00	MO				
DESCRIPTION:	X Base Bid	0095 - Operation o	of 6 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
95	48.00	HR				
DESCRIPTION:	X Base Bid Alt.#	0096 - Operation o	of 6 Inch Bypass	Pump		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
96	1.00	WK				

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

Inches Property of the Control of th						
DESCRIPTION: Sase Bid 0097 - Operation of 6 Inch Bypass Pump						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE FXTENSION (QUANTITY						
State of the state	times Unit Price)					
97 1.00 MO						
X Base Bid 0098 - Operation of 8 Inch Bypass Pump						
DESCRIPTION: Alt.#						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Price)					
98 48.00 HR	amico ome (rico)					
W p. s. p. s.						
DESCRIPTION: Sase Bid 0099 - Operation of 8 Inch Bypass Pump						
AIT.#						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Price)					
99 1.00 WK						
X Base Bid 0100 - Operation of 8 Inch Bypass Pump						
DESCRIPTION: Alt.#						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Price)					
100 1.00 MO	umes out Frice)					
1.00 WO						
DESCRIPTION: Sase Bid 0101 - Operation of 10 Inch Bypass Pump						
Alt.#_						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Price)					
101 48.00 HR						
Base Bid 0102 - Operation of 10 Inch Bypass Pump						
DESCRIPTION: Alt.#						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Brice)					
102 1.00 WK	unies onit Frice)					
102 1.00 991						
DESCRIPTION: X Base Bid 0103 - Operation of 10 Inch Bypass Pump						
Alt.#_						
REF NO. QUANTITY UNIT OF MEASURE UNIT PRICE UNIT PRICE EXTENSION (Quantity	times Unit Price)					
103 1.00 MO						
V Bago Bid						
	X Base Bid 0104 - Operation of 12 Inch Bypass Pump					
DESCRIPTION.						
	times Unit Price\					

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053 **CONTRACT FOR PREVENTATIVE MAINTENANCE** (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	Marie .			
DESCRIPTION:	X Base Bid	0105 - Operation	of 12 Inch Bypa	ss Pump
DESCRIPTION.	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
105	1.00	WK		
	[F] · ·		150	
DESCRIPTION:	X Base Bid	0106 - Operation	of 12 Inch Bypa	ss Pump
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
106	1.00	MO		
	X Base Bid	0105 5		a Attended to the state of the
DESCRIPTION:		0107 - Extension	or 6 Inch Bypas	s Discharge Force Main Piping
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
107	200.00	LF	2	
	X Base Bid	0108 - Extension	of & Inch Bimas	s Discharge Force Main Piping
DESCRIPTION:	Alt.#	0100 - Excension (or a filen bypas	s bischarge roice Main Piping
REF NO.	QUANTITY			
		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
108	200.00	LF		
		-		
	X Base Bid	0109 - Extension of	of 10 Inch Bypa	ss Discharge Force Main Piping
DESCRIPTION:	Alt.#		11	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
109	200.00	LF		
100				
DESCRIPTION	X Base Bid	0110 - Extension o	of 12 Inch Bypa	ss Discharge Force Main Piping
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
110	200.00	LF		
	V Desc Did			
DESCRIPTION:	X Base Bid	0111 - Place and I	Remove Temporar	y Ashpaltic Concrete
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
111	1,000.00	SQYD		
	X Base Bid	0112 Demosts	Depless DGC P-	-duran (O Tarah Mai ala)
DESCRIPTION:		U112 - Kemove and	Replace PCC Ros	adway (9 Inch Thick)
	Alt.#	No. of the last of		X
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
112	800.00	SQYD		

Bid# 50-00132469

JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

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CONTRACTOR OF THE STATE OF THE					
DESCRIPTION:	X Base Bid	0113 - Remove and	Replace Asphal	tic Concrete	Roadway
	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
113	90,000.00	SQYD			
				•	
	X Base Bid	0114 - Remove and	Penlage Congre	to Drivowava	(4 Inch Thick)
DESCRIPTION:	Alt.#	orra Kemove and	Replace Concre	ce Diiveways	(4 Inch Intex)
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
114	2,000.00	SQYD	0.0.7.7.0.2		Chiri Filo Extension (Quality times onto Filos)
	V Dage Did	political for their			
DESCRIPTION:	X Base Bid	0115 - Remove and	Replace Concre	te Driveways	(6 Inches Thick)
	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
115	2,000.00	SQYD			
F					
	X Base Bid	0116 - Remove and	Replace Concret	ce Curb	
DESCRIPTION:	Alt.#		-		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
116	100.00	LF			
	X Base Bid				
DESCRIPTION:		0117 - Site Specif	ic Traffic Cont	rol Device F	Plan
REF NO.	QUANTITY QUANTITY	UNIT OF MEASURE			
			UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
117	8.00	EA			
NOTON CONTRACTOR OF STREET	I				
DESCRIPTION:	X Base Bid	0118 - Traffic Con	trol Device Set	-Up	
DESCRIPTION.	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
118	70.00	EA			
	X Base Bid	0119 - Traffic Con	trol Device One	ration	
DESCRIPTION:	Alt.#	0119 1141110 001	ctor bevice ope	cracion	¥
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
119	90.00	DY	0111111102		OHIT FREE EXTENSION (Quantity times office free)
***	20.00				
	⊡ □ □ □				
DESCRIPTION:	X Base Bid	0120 - Traffic Fla	gman		
	Alt.#				<u> </u>
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE		UNIT PRICE EXTENSION (Quantity times Unit Price)
120	150.00	HR I			

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bid	Secret code on a sec		
DESCRIPTION:		0121 - Insertion	of 5.5MM RCPP i	n 8 Inch Force Main
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
121	500.00	LF		
	9		1	
	X Base Bid			
DESCRIPTION:		0122 - Insertion	of 5.5MM RCPP 1	n 10 Inch Force Main
	Alt.#		·	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
122	1,000.00	LF		
	X Base Bid	0122 - Incortion	of F EMM DCDD i	n 12 Inch Force Main
DESCRIPTION:	Alt.#	0123 - Insercion	OI 3.5MM RCPP I	II 12 INCH FOICE MAIN
REF NO.	QUANTITY	LIMIT OF MEASURE		
.292000		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
123	500.00	LF		
	X Base Bid	0124 - Insertion	of 5.5MM RCPP i	n 14 Inch Force Main
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
124	1,000.00	LF	UNITIMOL	ONTI PRICE EXTENSION (Quantity times offit Price)
124	1,000.00	LI		
DESCRIPTION	X Base Bid	0125 - Insertion	of 5.5MM RCPP i	n 18 Inch Force Main
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
125	1,000.00	LF		
	V page Pil		NOT THE RECEIVED SHOULD BE SEEN	
DESCRIPTION:	X Base Bid	0126 - Additional	1.5 MM Thickne	ss for 8 Inch - 12 Inch RCPP
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
126	4,050.00	LF		
	X Base Bid	0127 - Additional	1 E MM Thickno	ss for 14 Inch - 18 Inch RCPP
DESCRIPTION:	Alt.#_	0127 - Additional	1.5 MM INICKNE	SS TOT 14 THEN - 16 THEN REPP
REF NO.	QUANTITY QUANTITY	UNIT OF MEACURE		
		UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
127	500.00	LF		
	X Base Bid	0128 - End Seals -	- Pressure RCPP	8 Inch - 12 Inch
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
128	4.00	EA		omen (addition) and of other root

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. SUITE 4400 GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P. 1

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	X Base Bid	0129 - End Seals	- Pressure RCPP	14 Inch - 18 Inch
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
129	2.00	EA		
	X Base Bid	0130 - Restore 6	Inch - 12 Inch	Force Main by Point Repair
DESCRIPTION:	Alt.#	(0 Foot - 10 Foot		• • • • • •
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
130	4.00	EA		
	X Base Bid	0131 - Restore 14	Inch - 18 Inch	Force Main by Point Repair
DESCRIPTION:	Alt.#	(0 Foot - 10 Foot		and the state of t
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
131	2.00	EA		
	•			
	X Base Bid	0122 Tofferson	D	les Mechaeles Piers Mech Com
DESCRIPTION:	Alt.#	0132 - Jefferson	Parisn-Penninsu.	lar Technology Pipe Tech Scan
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRIOR EXTENSION (O
132	7.00	EA	UNITERICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
102	7.00	LA		
DESCRIPTION:	X Base Bid	0133 - Jefferson I	Parish-Penninsul	lar Technology Pipe Tech Check
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
133	6.00	EA		*
DESCRIPTION	X Base Bid	0134 - Jefferson H	Parish - Pennins	sular Technology Pipe Tech View
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
134	8.00	EA		
E Maria de la companya de la company	X Base Bid	0135 - Contractor	-Incity Sewer Ma	ester Software
DESCRIPTION:	Alt.#	0101	national national residence in the	abeel bolewale
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
135	2.00	EA		
	X Base Bid			
DESCRIPTION:		0136 - Contractor-	·Lucity Sewer Ma	ster Field License
	Alt.#	Was to the same of	-	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
136	2.00	EA I	1	

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT SUITE 4400 200 DERBIGNY ST. GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	[E] -	3.0		
DESCRIPTION:	Base Bid 0137 - Data Entry Clerk			
BEGOIGH HOIG.	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
137	400.00	HR		
,				
	X Base Bid			
DESCRIPTION:		0138 - 4 Inch HDP	E Horizontal Di	rectional Drilled Force Main
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
138	1.00	LF		
	X Base Bid	0139 - 6 Inch HDP	E Horizontal Di	rectional Drilled Force Main
DESCRIPTION:	Alt.#	organ organization	norrzoncar br	rectional brilled Force Main
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT RELOC EXTENSION (Occasito disease Unit Brise)
139			UNITPRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
139	1,000.00	LF		
in the second	X Base Bid	0140 - 8 Inch HDP	E Horizontal Di	rectional Drilled Force Main
DESCRIPTION:	Alt.#_			to the second to
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
140	1,000.00	LF		
	[F7]			
DESCRIPTION:	X Base Bid	0141 - 10 Inch HD	PE Horizontal D	irectional Drilled Force Main
BEGGIAI HOIA	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
141	1,000.00	LF .		
	X Base Bid	0142 12 7	NE W	institutional Publical Property Wales
DESCRIPTION:	Alt.#	0142 - 12 Inch HD	PE HOTIZONTAL D	irectional Drilled Force Main
055.10		Microscope and Company and Com		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
142	1,000.00	LF		
	X Base Bid	0143 - 16 Inch HD	PE Horizontal D	irectional Drilled Force Main
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
143	1,000.00	LF		Giller (gamm, mass differ field)
	1,300.00			
			×	
DESCRIPTION:	X Base Bid	0144 - 24 Inch HDE	E Horizontal D:	rectional Drilled Force Main
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
144	1,000.00	LF		

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT

200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bid 0145 - 30 Inch HDPE Horizontal Directional Drilled Force Main					
DESCRIPTION:	Alt.#		TO STATE OF STATE AND A CONTRACTOR AND ADMINISTRATION OF THE BASE AND ADMINISTRATION.			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
145	1,000.00	LF				
,	•					
	X Base Bio	d 0146 Tratallati	on of Handison	Access Ramp at Curb/Street Transition		
DESCRIPTION:	Alt.#	- 0140 - INSCALLACE	on or handreap	Access Ramp at Curb/Street Transition		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
146	100.00	SQYD				
T# 1	X Base Bid	d 0147 - Additional	Cranular Matan	4-1		
DESCRIPTION:		ora, - Addictonar	Granular Mater	IdI		
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
147	50.00	CUYD	GIIITTIGE	OHIT FROM LATEROOM (Quantity times officerice)		
		0015				
	X Base Bid		44			
DESCRIPTION:		0148 - 5/8 Cubic !	Yard Track Back	hoe		
BEE NO	Alt.#_					
REF NO. 148	QUANTITY 10.00	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
140	10.00	DY				
DESCRIPTION:	X Base Bid	0149 - 1 Cubic Ya	rd Track Backho	е		
	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
149	10.00	DY				
DESCRIPTION.	X Base Bid	0150 - 2 Cubic Yar	d Rubber Tire	Loader		
DESCRIPTION:	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
150	10.00	DY				
	X Base Bid	0151 - 2 Cubic Yaı	rd Track Backho	9		
DESCRIPTION:	Alt.#					
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
151	10.00	DY				
	X Base Bid	0152 D 4 D		-		
DESCRIPTION:	Alt.#	0152 - D-4 Dozer				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	LIMIT DDICE EVTENCION (Oversite disease Unit But		
152	10.00	DY	UNITERICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
	.0.50	D1				

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P. [

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bid	0153 - Chain Saw		
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	I INIT PRIOR	
			UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
153	20.00	DY		
	X Base Bid	0154 - Multi-Purp	oco Carr	
DESCRIPTION:	Alt.#	0134 - Maici-Faip	ose saw	
DEF NO				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
154	20.00	DY		
	X Base Bid	Olee 2 Inch Die	alaram Drawa and Ele	OO Fact and FO Fact Disabase Washington
DESCRIPTION:		0155 - 3 Inch Dia	pnram Pump with	20 Foot and 50 Foot Discharge Hoses
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
155	20.00	DY		
	X Base Bid	0.56		
DESCRIPTION:	=	0156 - 6 Inch Cen	trifugal Pump w	ith 20 Foot and 50 Foot Discharge Hoses
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
156	20.00	DY		
	•			
THE RESERVE OF THE PARTY.	V Dage Did	The second secon		
DESCRIPTION:	X Base Bid	0157 - Small Tools	5	A
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
157	30.00	DY		
	[7] P P. 1			
DESCRIPTION:	X Base Bid	0158 - Pick-Up Tru	ıck	
DECORAL HOLL	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
158	30.00	DY		
			W-1,-2-	
	[v] p p. : -			
DESCRIPTION:	X Base Bid	0159 - Utility Tr	ıck	
DECORUI HORE	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
159	30.00	DY	25	
		- 1		
	□ = -/-			***************************************
DESCRIPTION:	X Base Bid	0160 - Single Axle	Truck	
DEGOTAL HOM.	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
160	5.00	DY		

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400 CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P. I

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	X Base Bid	0161 - Tandem Ax	le Dump Truck		
	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
161	5.00	DY			
	X Base Bid	0162 - Wolding To	nak Complete wi	th 200A Welder and Torch Set	
DESCRIPTION:		oroz werding in	dck complete wi	ch 200A Weider and Torch Sec	
REF NO.	QUANTITY	UNIT OF MEASURE	I INIT PRIOR	THE PROPERTY OF THE PROPERTY O	
162			UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
102	10.00	DY			
	X Base Bid	0163 - Small Gaso	line Wacker Pla	te Approx. 24 Inch X 24 Inch	
DESCRIPTION:	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
163	15.00	DY		Can the David Can (Quantity and Committee)	
	10.00				
DESCRIPTION:	X Base Bid	0164 - Low Boy			
DESCRIPTION.	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
164	40.00	HR			
	X Base Bid				
DESCRIPTION:		0165 - Foreman			
	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
165	100.00	HR HR			
	X Base Bid	0166 - Operator			
DESCRIPTION:	Alt.#	oloo - Operacor			
REF NO.	QUANTITY	UNIT OF MEASURE	LINET DDIOF	THE PRIOR PATROLOGY OF AN ALL HAVE	
166	2.022		UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
100	100.00	HR			
	X Base Bid	0167 - Pipe Layer			
DESCRIPTION:	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
167	200.00	HR			
-	- 20				
DESCRIPTION:	X Base Bid	0168 - Laborer			
DESCRIPTION.	Alt.#				
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
168	200.00	HR		•	

Bid# 50-00132469

TO: JEFFERSON PARISH PURCHASING DEPT 200 DERBIGNY ST. S GRETNA, LA 70053 SUITE 4400 CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	X Base Bid	0169 - Welder		
REF NO.	QUANTITY	UNIT OF MEASURE	LINET DOLOT	
169		Victoria de la Constantina del Constantina de la Constantina del Constantina de la C	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
109	200.00	HR		
	X Base Bid	0170 - Welder Hel	per	
DESCRIPTION:	Alt.#		-	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
170	200.00	HR		Committee Estate Committee
				
DESCRIPTION:	X Base Bid	0171 - Carpenter		
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
171	200.00	HR		
	X Base Bid	0172 - Truck Driv	or	
DESCRIPTION:	Alt.#	01/2 - IIUCK DIIV	er	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	INIT PRIOR EVERNOLONI (O W
172	200.00	HR	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
172	200.00	пк		
Selection of the select				
DESCRIPTION:	X Base Bid	0173 - Electricia	n	
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
173	100.00	HR		
			-	
	X Base Bid			
DESCRIPTION:		0174 - Mechanic		
DEFNO	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
174	100.00	HR		
	X Base Bid	0175 - Unforseen	Work-Point Repa	ir of Existing Sewer Mainline/Force Mains,
DESCRIPTION:	Alt.#			Shall not be Included in the Total Bid Price
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
175	1.00	JOB		, , , , , , , , , , , , , , , , , , , ,
		176-50-00		
	V Dag - 24 2	(AMAZE 200 MIZE	262 4004	
DESCRIPTION:	X Base Bid	0176 - Set Up 3 Ir	nch Bypass Pump	
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
176	16.00	EA		

Bid# 50-00132469

TO: <u>JEFFERSON PARISH</u>
PURCHASING DEPT
200 DERBIGNY ST. SUITE 4400
GRETNA, LA 70053

CONTRACT FOR PREVENTATIVE MAINTENANCE (LINING) OF EXISTING SANITARY & STORM SEWERS, INCLUDING SERVICE LATERALS AT SCATTERED LOCATIONS IN J.P.

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

	X Base Bid	0177 - Set Up 4 I	Inch Pimaca Dumn	
DESCRIPTION:	Alt.#_	oirr sec op 4	Inch bypass Fump	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
177	16.00	EA		
	X Base Bid	0178 - Slab Soddi	ing	
DESCRIPTION:	Alt.#		-	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
178	1,500.00	SQYD		
	Base Bid			
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	Base Bid			
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	Base Bid			e .
	Alt.#		_	
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
	[C]			
DESCRIPTION:	Base Bid			
	Alt.#			
REF NO.	QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
	□ n n: 1			
DESCRIPTION:	Base Bid Alt.#	10		
REF NO.	QUANTITY QUANTITY	UNIT OF MEASURE	UNIT PRICE	LINIT RRICE EVERNOON (Overaffe direce Helt Relea)
KEI IIO.	40/11/11	SAIT OF MEASURE	UNITERICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
			1	
	Base Bid			
DESCRIPTION:	Alt.#			
REF NO.	QUANTITY QUANTITY	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
			J. I.	Oth FinoL Extension (Quantity times Offic Files)

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF
INCORPORATED.
AT THE MEETING OF DIRECTORS OF
RESOLVED. THAT
I HEREBY CERTIFY THE FOREGOING TO BE A TRUE AND CORRECT COPY OF AN EXCERPT OF THE MINUTES OF THE ABOVE DATED MEETING OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THE SAME HAS NOT BEEN REVOKED OR RESCINDED.
SECRETARY-TREASURER
DATE

Public Works Bid Affidavit Instructions

- Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.
- Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.
- Affidavit must be notarized or the affidavit will not be accepted.
- Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.
- Affiant MUST select either A or B when required or the affidavit will not be accepted.
- Affiants who select choice A must include an attachment or the affidavit will not be accepted.
- If both choice A and B are selected, the affidavit will not be accepted.
- Affidavit marked N/A will not be accepted.
- It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.

Instruction sheet may be omitted when submitting the affidavit

Public Works Bid

AFFIDAVIT

STATE OF		
PARISH/COUNTY OF _		
BEFORE ME, the u	ndersigned authority, personally came and appeared	l:
, (A	ffiant) who after being by me duly sworn, deposed a	and said that
he/she is the fully authorize	d of	(Entity),
the party who submitted a b	id in response to Bid Number, to the	Parish of
Jefferson.		
Affiant further said:		
Campaign Contribution Dis	closures	
(Choose A or B, if opti	on A is indicated please include the requir	red
attachment):		
Choice A	Attached hereto is a list of all campaign contribut the date and amount of each contribution, made to former elected officials of the Parish of Jefferson Affiant, and/or officers, directors and owners, incemployees, owning 25% or more of the Entity duperiod immediately preceding the date of this afficurrent term of the elected official, whichever is gentity, Affiant, and/or Entity Owners have not matcontributions to or in support of current or former Jefferson Parish Council or the Jefferson Parish Por in the name of another person or legal entity, elindirectly.	by Entity, luding ring the two-year davit or the greater. Further, ade any members of the resident through
Choice B	there are <u>NO</u> campaign contributions made which disclosure under Choice A of this section.	would require

Page 1 of 4 Updated: 02.27.2014

Affiant further said:

Debt Disclosures

(Choose A <u>or</u> B, if option A is indicated please include the required attachment):

Choice A	Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any an all debts owed by any elected or appointed official of the parish to the Affiant.
Choice B	There are NO debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Affiant further said:

Affiant personally has not been convicted of, nor has he/she entered into a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below. No individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the Bidding Entity, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below. A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall permanently bar any person or the bidding entity from bidding on public projects:

- (a) Public bribery (R.S. 14:118)
- (b) Corrupt influencing (R.S. 14:120)
- (c) Extortion (R.S. 14:66)
- (d) Money laundering (R.S. 14:230)

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A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall bar any person or the bidding entity from bidding on public projects for a period of five years from the date of conviction or from the date of the entrance of the plea of guilty or nolo contendere:

- (a) Theft (R.S. 14:67)
- (b) Identity Theft (R.S. 14:67, 16)
- (c) Theft of a business record (R.S. 14:67.20)
- (d) False accounting (R.S. 14:70)
- (e) Issuing worthless checks (R.S. 14:71)
- (f) Bank fraud (R.S. 14:71.1)
- (g) Forgery (R.S. 14:72)
- (h) Contractors; misapplication of payments (R.S. 14:202)
- (i) Malfeasance in office (R.S. 14:134)

The five-year prohibition provided for in this section shall apply only if the crime was committed during the solicitation or execution of a contract or bid awarded pursuant to these provisions. If evidence is submitted substantiating that a false attestation has been made and the project must be readvertised or the contract cancelled, the awarded entity making the false attestation shall be responsible to the public entity for the costs of rebidding, additional costs due to increased costs of bids and any and all delay costs due to the rebid or cancellation of this project.

[The remainder of this page is intentionally left blank.]

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Affiant further said:

- (1) Entity is registered and participates in a status verification system to verify that all employees in the State of Louisiana are legal citizens of the United States or are legal aliens.
- (2) Entity shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the State of Louisiana.
- (3) Entity shall require all subcontractors to submit to the Entity a sworn affidavit

verifying compliance with sta	atements (1) and (2).
	Signature of Affiant
	Printed Name of Affiant
SWORN AND SUBSCRIBED TO BEF	
ON THE DAY OF	, 20
Notary Public	
Printed Name of Notary	·
Notary/Bar Roll Number	
My commission expires	

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